

ABSTRACTS of PAPERS and POSTERS

1. **ABDY, Richard**, The British Museum, London, United Kingdom

The last coin in Pompeii? The coin hoard from the house of the golden bracelet

Of the coinage circulating at the time of the eruption in Pompeii in AD 79, R. Cantilena has been able to publish a summary stretching from the 3rd century BC through to the reign of Vespasian (AD 69-79) as expected, but it even includes two *denarii* from the reign of Titus who had only succeeded to power at the end of June AD 79, just two months prior to the traditional date of the eruption of Vesuvius. Abdy notes that one of these two coins, from the coin hoard found near the bodies of its owners in the House of the Golden Bracelet has been recently used to challenge the traditional 24th August eruption date, despite being only in partly legible condition. It has long been known (although not well known) that nearly a dozen different dates were recorded in ancient writings; placing the destruction of the Vesuvian towns at various points throughout the late summer and autumn of AD 79 (24th August is simply the earliest of the run of these dates). The coin from the House of the Golden Bracelet had been thought to carry imperial titulature that was only awarded in September 79. However, after further conservation, it can be seen that there are at least two die links to the Pompeii *denarius* (both specimens are *aurei*, an example of occasional die sharing between the gold and silver of this period), allowing the whole coin to be read and demonstrating its production during July-August of that year.

2. **ACHACHE, Steve**, Bibliothèque Nationale de France, Paris, France

Liaisons de coins entre ateliers monétaires et typologie des séries d'Orléans, de Château-Landon et de "Blois-Vendôme": le cas du Trésor du "Loiret"

Cette communication a pour sujet le Trésor dit "du Loiret", daté entre le premier quart et le milieu du Xe siècle. Composé de plus de mille monnaies conservées au Cabinet des Médailles de la BnF, le Trésor comprend d'importantes séries, dont celles d'Orléans et Château-Landon pour Raoul (923-936), ou encore les premiers monnayages des seigneuries de Blois et Vendôme. En étudiant conjointement les différents types monétaires des séries d'Orléans et de Château-Landon, nous avons constaté qu'il existe des liens indéniables entre les types frappés sous Raoul. Dans l'atelier d'Orléans comme dans celui de Château-Landon, le droit des monnaies porte la légende + CRATIA D-I REX et le monogramme de Raoul (RDFS). La gravure des coins de droit est semblable entre les deux ateliers. Il existe d'ailleurs une liaison de coins entre le droit d'un denier d'Orléans et celui d'un denier de Château-Landon. Cette découverte confirmerait l'hypothèse autrefois formulée par J. Duplessy à propos de l'existence d'ateliers monétaires "mineurs" tel que Château-Landon, dépendant d'un atelier régional, celui d'Orléans. L'utilisation d'un même coin de droit, la similarité des gravures et des types ouvrent plusieurs hypothèses: le partage des coins et l'organisation interne des ateliers; la circulation des monnaies et celle des graveurs. Ces observations amènent à reconsidérer l'autorité des premiers Robertiens dans leurs domaines. Ces questions sont étendues aux monnayages des premiers seigneurs de Blois et de Vendôme. Les seigneurs de Vendôme, alors dans l'influence des comtes de Blois, frappent monnaie dans un type similaire à celui des comtes.

3. **ACKERMANN, Rahel C.**, Inventar der Fundmünzen der Schweiz, Berne, Switzerland

The Swiss Inventory of Coin Finds

The Swiss Inventory of Coin Finds (SICF) was founded in 1992 and is the centre of expertise for all coin finds in Switzerland. The database contains records of coin finds and coin-like objects like tokens, medals or coin weights from antiquity to modern times. The current finds as well as corresponding publications of the ongoing year are gathered in the annual Bulletin IFS ITMS IRMS. Scientific evaluations of coin finds according to geographical (i.e. cantons) or topical criteria (church finds, Celts) are being presented in the monographic series. Great attention is currently being paid to the online resources. All our bulletins and numerous articles etc. are at everyone's disposal as pdf files. More and more data stock is being uploaded into our online database like e.g. roughly 15,000 coins from Augusta Raurica. Internationally acclaimed standards which enable the exchange and the fusion of different data stock in the first place are becoming increasingly important. The SICF formulates criteria for the structured registration of coin finds in Switzerland. We also coordinate the exchange with partner-institutions abroad and are an active partner of the European Coin Find Network (ECFN).

4. AKOPYAN, Alexander, Federal University, Kazan, Russian Federation

Dvin in the eleventh and twelfth centuries. City history in the light of new numismatic materials

The paper studies unknown before coins unearthed in 2010–13 on the site of medieval settlement Dvin. They specify the city's history of the eleventh and twelfth centuries, the less investigated period in the history of Dvin. Thus, after the last dirham of Dvin of 944, coins started being struck here by Shāwur Shaddādīd (1022–50). Apparently when Dvin fell under the Byzantine rule (1049–53), coins with full-face bust of Christ were struck here. Next coins belong to Abū Nasr Iskandar b. Shāwur (1053–73 or later). Following them are anonymous coins that apparently were struck by the city council. In 1063 Dvin was conquered by Seljuqs. Possibly Abū Nasr Iskandar continued his rule, and struck coins with name of sultan Malik Shāh I (1072–92), and later with name of amīr Arslān-Tegīn and prince Dā'ūd (before 1092). Apparently next coins were struck by some amīr Nasr (=Abū Nasr Iskandar?, 1092–1105?). Later coins were struck in the name of sultan Muhammad (apparently by local ruler Qizil Arslān in 1105–18). Next coins bear names of atābek Tughriltigīn and prince Dā'ūd (1118–21). No coins are known from the following period, and they were renewed by Fahr al-Dīn Akhdabid (1144–before 1161). Between 1153 and 1160 'Izz al-Dīn Saltuq II, amīr of Arzarūm, conquered Dvin and struck here coins with the Armenian cross on the reverse. Later, before the final conquest of Dvin by Eldigüz, anonymous coins were struck in the city possibly also by the city council.

5. ALLEN, Martin, Fitzwilliam Museum, University of Cambridge, United Kingdom

Coins and Churches in Medieval England

There is written and archaeological evidence for the use of coins as votive objects at saints' shrines in medieval England. Coins were also bent to dedicate them as votive objects, and bent coins found in non-ecclesiastical contexts may have had this function. Metal-detector surveys around ecclesiastical buildings provide evidence of pilgrimage and commercial activity.

6. ALTERI, Giancarlo, Veneranda Biblioteca Ambrosiana, Milano, Italy

Un piccolo-grande Medagliere: le collezioni numismatiche della Veneranda Biblioteca Ambrosiana

Si mostra al pubblico per la prima volta il nascente Medagliere della Veneranda Biblioteca Ambrosiana, le cui collezioni fino ad oggi non era possibile consultare. Si tratta di una raccolta di monete greche, della repubblica romana, imperiali romane e di diverse zecche italiane dal Medioevo all'Unità d'Italia. Spiccano in queste raccolte, le monete papali, quelle di Milano, di Venezia, della Toscana e dell'Emilia. Ricca è anche la collezione di medaglie soprattutto dei secoli XVII e XVIII. Non mancano esemplari dell'arte medaglistica moderna e contemporanea.

7. AMANDRY, Michel, formerly Bibliothèque Nationale de France, Paris, France

Césarée a-t-il été le seul atelier de Cappadoce à frapper un monnayage d'argent sous Hadrien?

L'étude précise des pièces d'Hadrien décrites comme 'anomalies' dans l'ouvrage de W. Metcalf, *The Silver Coinage of Cappadocia*, laisse penser que ces frappes proviennent d'un autre atelier que celui de Césarée. Des tridrachmes, didrachmes et drachmes ont sans doute été frappés à Hierapolis Comana.

8. AMATO, Rosalba, Museo Archeologico Regionale "Paolo Orsi", Siracusa, Italy - **CIURCINA, Concetta**, Museo Archeologico Regionale "Paolo Orsi", Siracusa, Italy

Segnalazione di rinvenimenti monetali in indagini di archeologia urbana a Siracusa

Una significativa documentazione di monete, da età greca a quella medievale, con una sequenza non sempre serrata e coerente, restituita da ricerche condotte in vari ambiti, testimonia la complessità della stratigrafia in una città da sempre intensamente abitata.

9. AMATO, Rosalba, Museo Archeologico Regionale "Paolo Orsi", Siracusa, Italy - **MANENTI, Angela Maria**, Museo Archeologico Regionale "Paolo Orsi", Siracusa, Italy

Comunicare le monete. Didattica e divulgazione al Museo Archeologico 'Paolo Orsi' di Siracusa

A cominciare dal nuovo allestimento del medagliere, inaugurato nel 2010, una serie di attività e laboratori didattici sono stati realizzati al Museo di Siracusa, per ampliare l'interesse della collettività nei confronti delle monete greche, e trasmettere, pur con rigore scientifico, i diversi livelli con cui leggiamo le monete.

10. ANDREWS, Murray, United Kingdom

'Noble, fair and fine': Single finds of English gold coins from later medieval England and Wales

The introduction of the florin and the noble in 1344 marked the beginnings of the first regular issue of English gold coinage in more than five centuries. Traditionally characterised as a coinage of international commerce, a growing number of single finds and hoards are shedding new light on the extent to which English gold permeated the domestic currency of later medieval England and Wales. This paper surveys the single find evidence, using a corpus of more than 300 coins to assess the changing circulation and function of English gold in its domestic context. The paper concludes with a comparative analysis of the depositional contexts of excavated single and hoard finds of English gold coin, raising questions on the extent to which single finds might represent 'casual losses' or hoarded wealth.

11. ANGELI BUFALINI, Gabriella, Museo Nazionale Romano, Italy

Il Medagliere MNR, la Banca dati Iuno Moneta e il Bollettino di Numismatica del MiBACT: un trinomio per la tutela, valorizzazione e fruizione del bene numismatico. Bilanci e prospettive

Nell'ambito di un più ampio programma di lavoro messo in atto dal Museo Nazionale Romano in Palazzo Massimo alle Terme, che da tempo si pone l'obiettivo di migliorare i servizi resi all'utenza relativi alla tutela, fruizione, valorizzazione, conservazione e catalogazione del patrimonio archeologico nazionale anche mediante l'utilizzo di nuovi mezzi e tecnologie avanzate, ben si inserisce l'attività del Medagliere del Museo Nazionale Romano incentrata a rendere fruibili le ricchissime collezioni numismatiche che conserva. L'adozione di sistemi informatici di ultima generazione, impiegati per la creazione di un archivio digitale documentale e fotografico (banca dati Iuno Moneta) e l'utilizzo della tradizionale editoria a stampa per la pubblicazione sistematica delle proprie raccolte (Bollettino di Numismatica del MiBACT), consentono al Medagliere di assicurare una sempre migliore promozione del bene numismatico. Le collezioni del Medagliere MNR sono oggi oggetto di un capillare e sistematico progetto di catalogazione, che si avvale della banca dati Iuno Moneta il grande contenitore digitale creato in seno al Portale dello Stato "Modus"- *Biblioteca Virtuale*, con lo scopo di acquisire i dati e le immagini di collezioni numismatiche di interesse nazionale, e del *Bollettino di Numismatica*, la storica rivista specialistica del MiBACT che da oltre trent'anni si dedica all'edizione dei materiali numismatici, oggi arricchita di due nuove collane digitali, *Studi e ricerche e Materiali*. Strumenti posti al servizio non soltanto del Medagliere romano, che per primo ne ha testato l'efficacia e i benefici, ma dell'intera comunità scientifica e di quanti vogliano rendere note e disponibili le collezioni numismatiche che custodiscono.

12. APOLITO, Pasquale, Università della Calabria, Italy

Medieval coins from Italian excavations at Kyme Aeolis: a preliminary report

The aim of the paper is to analyze and reconstruct the presence of the medieval numismatic evidences uncovered during 30 years of excavations of the Italian Archaeological Mission at Kyme Aeolis, making clear the identification of the mints. The next step will be to propose a diachronic model of distribution of the types, from the Byzantine period to the Middle Ages. Two are the basis of our research, to reconstruct the complex relationships between Kyme, Constantinopolis and the great powers of the West, as Venice, and to propose a distribution model within the archaeological contexts. The presence of *nummoi*, *pentanummoi*, *dekanummoi* and *folleis* from Constantinopolis and other Byzantine mints testify the great activity of the harbour at Kyme during the Byzantine Empire and the "*deniers tournoises*" of Thebae and Glarentsa "Frankish Greece" post IV Crusade mints and Venetian coins, are the indicator that Kyme survived as commercial hub for the sea routes of the Mediterranean Sea also in the XIV century BC.

13. APOSTOLOU, Eva, Numismatic Museum of Athens, Greece

Les plinthophores rhodiennes et la fin de ce monnayage

Les plinthophores ont été la monnaie par excellence de Rhodes hellénistique, à partir de c. 190 av. J.-C., pour, au moins, un siècle. Vers la fin de la période du monnayage plinthophorique Rhodes a aussi émis de statères d'or ainsi que d'autres dénominations, elles aussi en or; quant au monnayage en argent de nombreuses émissions d'hémidrachmes plinthophores ont été, elles aussi, apparues avec les drachmes plinthophores. Ce phénomène, à savoir, l'augmentation de la production monétaire rhodienne mérite une explication raisonnable par rapport aux événements historiques et aux nouvelles conditions économiques qui ont influencé l'ensemble du monde de l'Orient hellénistique.

14. ARENA, Emiliano, Università di Messina, Italy

L'emissione a leggenda NEOΠΟΛΙ(TΩΝ) e la fondazione di Tauromenion

Un *dilitron* argenteo conservato in due esemplari al Münzkabinett di Berlino recante i tipi della monetazione nassia di età florida (D/Testa giovanile di Apollo con serto d'alloro; R/ Sileno accosciato con ramo d'ulivo nella mano d.; a d. erma di Dioniso barbato su alta base; leggenda NEOΠΟΛΙ(TΩΝ)) attesta l'esistenza di enigmatici *Neopolitai* che monetavano nella Sicilia del IV sec. usando la medesima iconografia di Naxos. Tale emissione costituisce un documento storicamente 'fluttuante', privo di un ancoraggio cronologico oggettivo, anche in virtù di una sintassi iconografico-tipologica e di una leggenda non poco problematiche, che hanno dato origine ad interpretazioni non univoche, collocanti il documento in scenari storici differenti. Variegate, infatti, le ipotesi di attribuzione del *dilitron*, via via collegato agli esuli Nassi rifugiatisi a Mylai nel 394, ad una nuova ed effimera Naxos che sarebbe sorta dopo il 403, all'insediamento mercenario creato da Dionisio I sul Tauro dopo il 392, che avrebbe emesso moneta solo sotto Dionisio II e prima della cosiddetta fondazione 'andromachea' del 358, infine alla Tauromenion del periodo tra Dione e Timoleonte. Una reinterpretazione delle fonti letterarie e di nuovi documenti epigrafici relativi alla fondazione di Tauromenion, unitamente ad una nuova esegesi della leggenda NEOΠΟΛΙ(TΩΝ) e della stessa politica monetale di Dionisio II, consentono ora una diversa collocazione dell'emissione nell'ambito della storia della *polis* tauromenitana del IV sec. a. C.

15. ARÉVALO GONZÁLEZ, Alicia, Universidad de Cádiz, Spain - BLÁNQUEZ PÉREZ, Juan, Universidad Autónoma de Madrid, Spain - ROLDÁN GÓMEZ, Lourdes, Universidad Autónoma de Madrid, Spain

Evidencias materiales de la fabricación de moneda en Carteia (San Roque, Cádiz)

El conocimiento arqueológico en torno a la ubicación de los talleres monetarios hispanos y de los artesanos que trabajaron en ellos, tanto de época republicana como imperial, es muy escaso. Hasta ahora han sido cuestiones abordadas, principalmente, a partir de los aspectos deducibles de las propias amonedaciones y, con la ayuda suplementaria de hallazgos casuales de cuños antiguos, de moldes de fundición, de flanes sin acuñar... del proceso técnico de fabricación de moneda en Hispania. Sin embargo, recientes excavaciones arqueológicas (2009 y 2013) llevadas a cabo en la ciudad punicromana de Carteia (San Roque, Cádiz) han documentado una serie de materiales, fundamentalmente cospeles, relacionados con la fabricación de moneda. Dichos hallazgos permiten proponer que la zona donde se han encontrado podría haberse utilizado como lugar físico para la acuñación de numerario en esta ciudad. Todo ello, de manera paralela pero, evidentemente, interrelacionada enriquece la documentación que, hasta la fecha, se ha extraído de las propias monedas en cuanto a los problemas técnicos de su fabricación.

16. ARICÒ, Rocco, Italy

Le kharrûbe dei due Ruggeri: un tentativo di classificazione

L'articolo fornisce un tentativo di classificazione delle *kharrûbe* siciliane attribuibili a Ruggero I e II. Grazie alla pubblicazione di alcuni tipi inediti ed alla lettura di tipologie note finora in maniera incompleta o imprecisa, viene proposta una classificazione del materiale noto ed inedito che consente di delineare lo sviluppo che questa monetazione ha avuto tra gli ultimi due decenni dell'XI secolo ed i primi quattro del XII. I dati che emergono spingono a teorizzare l'esistenza di più zecche attive contemporaneamente nell'isola ed a disegnare un primo abbozzo delle aree di circolazione di tali monete a livello sub-regionale.

17. ARNOLD-BIUCCHI, Carmen, Harvard University, United States of America - **VAN SCHAİK, Katherine**, Harvard University, United States of America

The meaning of the crab on ancient Greek coins and its relation to ancient medicine: a new approach

The crab appears on numerous ancient Greek coinages from the early electrum issues at the end of the seventh and the beginning of the sixth centuries through the latest Greek silver issues of the 2nd century BC, such as the *plinthophoroi* coinage of Kos. The major mints where this design appears are Akragas in Sicily and the island of Kos. Many of these coinages have been treated in depth yet the meaning of the crab remains elusive. It has been associated with Poseidon or Herakles and in Akragas it is usually interpreted as a symbol of the namesake river-god as well as a pun on the name of the city. Most of these interpretations focused on individual mints. We propose a comprehensive catalogue of crab representations on Greek coins and an attempt towards a global interpretation based not only on the coins but on the monuments and sanctuaries of the individual cities issuing these coins as well as on cult attestations such as inscriptions and other objects of material culture. We also review the literary sources. The “new approach” pertains to the etymology of “καρκίνοϛ, crab and cancer”. The dual meaning as decapod crustacean and spreading tumorous disease has been observed before but never researched in depth. The evidence seems to point to a relation between the crab and healing gods that can apply to all mints involved and shed light on ancient medicine and pathology as well as mythology.

18. ARZONE, Antonella, Museo di Castelvecchio, Verona, Italy - **CAPPIOTTI, Francesco**, Museo di Castelvecchio, Verona, Italy

Il catalogo della collezione di monete greche del Museo di Castelvecchio di Verona (poster)

Si presenta il catalogo, in corso di pubblicazione, delle monete della serie greca e romano provinciale conservate nel Museo di Castelvecchio di Verona. La collezione del Museo civico deriva dalla fusione di più nuclei distinti, provenienti in parte da ritrovamenti archeologici, in parte da collezioni private che furono acquistate dal Comune nel corso della seconda metà dell'Ottocento; tra queste ultime il contributo più consistente deriva dall'apporto delle raccolte di Giacomo Verità e di Jacopo Muselli. Il nucleo compreso nel catalogo è di circa duemila settecento pezzi, principalmente nominali di bronzo. Pur essendo una percentuale esigua della raccolta numismatica di Castelvecchio, la cui fama è legata al tesoro della Venera, le monete greche offrono un campione documentario di notevole valore, essendo rappresentate quasi tutte le zone del mondo greco ed essendo presenti pezzi inediti. Nell'ambito del progetto di inventariazione e di catalogazione informatica del patrimonio numismatico del Museo si è proceduto negli anni alla precatalogazione informatizzata e alla campagna fotografica. Il lavoro è iniziato alla fine degli anni Ottanta del '900, quando veniva utilizzata una prima versione di *Banca Dati Numismatica*, facente capo al centro di catalogazione della Regione Veneto per la numismatica con sede al Museo Bottacin di Padova, ed è continuata con versioni più recenti. Con la catalogazione si è proceduto al riordino topografico delle monete e alla loro disposizione in successione cronologica all'interno dei cassetti delle casseforti che le contengono. La pubblicazione del catalogo che qui si presenta è quindi il momento conclusivo di un lungo *iter*.

19. ASSENMAKER, Pierre, Université de Namur, Belgium

Il significato del titolo 'imperator' nelle legende monetarie d'età repubblicana: valore istituzionale e autorappresentativo

Il titolo '*imperator*' appare nelle legende monetarie alla fine degli anni '80 del I secolo a.C., durante la guerra civile tra Silla e i '*populares*', o – come sosteniamo – già all'epoca della Guerra Sociale (91-88 a.C.). Fino alla creazione del Principato, esso sarà impiegato da vari comandanti militari che coniarono moneta – romana o straniera – in diverse regioni dell'impero. Ma, se il titolo '*imperator*' è generalmente interpretato come un riferimento all'acclamazione del generale da parte dei soldati a seguito di una vittoria, tuttavia riteniamo che sulle monete repubblicane (così come in ambito epigrafico), esso ricorra anche nelle coniazioni di (*pro*)*magistrati 'cum imperio'*, indipendentemente da un'eventuale acclamazione imperatoria. La presente relazione passerà in rassegna le coniazioni repubblicane che recano il titolo '*imperator*' al fine di verificare l'ipotesi su espressa (per altro non priva di conseguenze in merito alla datazione delle coniazioni imperatorie). Inoltre saranno analizzati anche gli intenti di coloro che si presentavano agli utenti della moneta in qualità di '*imperatores*': essi facevano riferimento all'*imperium*' in quanto principio legittimante la loro posizione (e quindi come fondamento giuridico delle loro coniazioni), o usavano l'appellativo che ne derivava al fine di commemorare una vittoria militare e così presentarsi come generali vittoriosi?

20. ATTWOOD, Philip, The British Museum, London, United Kingdom

Living without the reducing machine: the case of Frank Bowcher

The introduction of the reducing machine in the nineteenth century revolutionized the way in which most medals were made in Britain as in other countries. Hailed as a liberating force, it allowed artists with no experience of die-engraving to use their own hands to produce medals. Sculptors and modelers could now become medalists without the necessity of learning a difficult and time-consuming technique or passing their designs to others. This positive attitude began to be questioned towards the end of the nineteenth century, and by the early twentieth century a counterview proposed that, far from being a development that had enhanced the artistic qualities of medals by attracting a broader range of talented artists, the use of the reducing machine had had a pernicious influence on medallic art and had resulted in increasing numbers of poorly designed works. This view was expressed by art historians, critics and practising artists in not only aesthetic but also strongly moral terms. This paper will examine this early twentieth-century phenomenon with particular reference to the medalist Frank Bowcher (1864-1938). An argument will be developed based around articles on Bowcher published during his lifetime, an unpublished diary written by the artist in the 1920s, and the evidence of the medals themselves. Bowcher was a prolific medalist, who produced well over one hundred medals in a career spanning nearly fifty years. Despite his importance no significant studies of Bowcher and his work have been published since his death.

21. AUDY, Florent, Stockholm University, Sweden

Roman Coins in Viking Contexts

A significant number of Roman coins are known from the Scandinavian Viking Age (c. 750-1100). These coins, mostly consisting of silver and bronze specimens of the 2nd-4th centuries, appear in different kinds of contexts: hoards, graves and settlement remains. With a few exceptions, they were deposited or lost more than 500 years after their minting in the Roman empire! The presence of Roman coins in Viking Age Scandinavia has received increasing attention in the past decade, but many questions remain unanswered, especially regarding their function and their transmission. This presentation will propose a new approach to the subject by focusing on an overlooked phenomenon: their re-use as ornaments. Our sample of Roman coins includes very few pierced and looped specimens. However, they provide useful information for understanding, on a general level, how and why some old Roman coins ended up in Viking hands (for instance, more detailed chronologies and particular types of combinations). In this presentation, special attention will be paid to the intricate biographies of the re-used coins and to the contexts in which they occur. The purpose is to determine how the Roman coins were passed down to the younger generations and how this bridge to the past was perceived by their users. In the background there is the central question of whether the Roman coins were discovered on ancient sites in Viking times or whether they had remained in circulation until then.

22. AUMAÎTRE, Héloïse, Université Paris 1 - Panthéon Sorbonne, France

Akè Ptolémaïs sous les Lagides: un atelier au cœur des problématiques syro-phéniciennes

Les sources textuelles et archéologiques abondent dans le même sens; Akè Ptolémaïs est, sous domination lagide, une cité d'une importance primordiale, tant d'un point de vue économique que d'un point de vue défensif. Refondée par Ptolémée II Philadelphe, cette cité est parfaitement desservie par les axes de communication terrestres et les voies maritimes, constituant un port de transit idéal pour l'Égypte, l'île de Chypre, les autres cités levantines et le bassin égéen. Son appartenance à la province de Syrie et Phénicie, glacis protecteur de l'Égypte, la place au cœur des conflits opposant les dynasties lagide et séleucide au III^e siècle av. J.-C. L'ouverture en 261 av. J.-C. de l'atelier monétaire d'Akè Ptolémaïs marque le début d'un monnayage intimement lié aux «guerres de Syrie». L'étude des tétradrachmes émis dans cet atelier, de Ptolémée II Philadelphe à Ptolémée VI Philométôr, indique différentes phases de production, rythmées par ces conflits. La comparaison avec les autres ateliers syro-phéniciens révèle une grande proximité stylistique, ainsi que l'existence d'une coordination de leurs frappes. La thésaurisation atteste d'une circulation des émissions syro-phéniciennes excluant le territoire égyptien, et certains de ces enfouissements peuvent être reliés à des événements militaires. L'influence de l'atelier d'Akè Ptolémaïs est mise en avant par l'existence d'un atelier non identifié, imitateur de ses types, légendes et monogrammes, élément d'autant plus intéressant du fait de la fermeture du système monétaire ptolémaïque. L'étude des émissions monétaires d'Akè Ptolémaïs permet ainsi d'apporter une source inédite sur l'histoire de cette province.

23. AWIANOWICZ, Bartosz, Polish Numismatic Society, Poland

Peculiarities in the Legends of Syrian denarii from the Flavians to the Severans

The aim of the paper is to explore such peculiarities in the legends of *denarii* minted in Syria (especially in Antioch) as: untypical abbreviations, omissions and interchanging of characters, incorrect letters etched in Latin words, fragmentary etching of a given character into the stamp die and etching of a superfluous character. My analysis of the peculiarities and errors in the legends of the Antiochian *denarii* of Pescennius Niger and Septimius Severus (*Notae Numismaticae* 2013, p. 125-134) has led to the conclusion that most of the untypical elements and errors in the *denarii* legends of the both emperors were due to the engravers' insufficient acquaintance with Latin and even Latin alphabet. It may be then highly probable that the striking of the *denarii* for the troops of Pescennius Niger and, subsequently, Septimius Severus was entrusted to the minters previously involved in the production of local coins with Greek legends. In the submitted paper I intend to discuss this phenomenon in a wider chronological context.

24. BAKER, Julian, Ashmolean Museum, Oxford University, United Kingdom

The height of deniers tournois minting in Greece, 1290-1310, according to new archaeometric data

The mints of central and southern Greece, especially Clarentza, Thebes, and Naupaktos, were emitting large quantities of *deniers tournois* in the period 1290-1310. This minting activity had political, military, and economic motivations which will be explored in this paper. Traditional numismatic sources - typology and epigraphy, the analysis of hoards and excavation coins - allow precisions on the dating and quantification. New archaeometric data add vital information on the inter-action of the three main mints.

25. BALDASSARRI, Monica, Museo Civico di Montopoli in Val d'Arno, Italy

Miliarenses and silver grossi in the western Mediterranean: some new documents and perspectives

The theme of the references to the *miliarenses* in medieval French and Italian documents, and the question of their possible identification with certain coins species of the period dates back to the nineteenth century. Since then, many scholars tackled the problem, suggesting essentially two types of interpretation: some authors believe that the term indicates the *dirham* imitations of some Christian mints distributed along the north-west coast of the Mediterranean, while others instead read it as a possible synonym for the "silver *grossi*", especially in the period immediately after their introduction, providing this way an explanation for some metrological aspects while anticipating the period of the first production. In recent years a more detailed reading of this phenomenon was proposed in the light of the complexity and peculiarities of medieval sources, both written and numismatic. The discovery of some new documents and the appearance of new studies on "silver *grossi*" of the high-Tyrrhenian area mints confirmed the need for a less monolithic approach to the problem and suggested new interpretations of the sources: these new data and interpretations are the topic of the communication.

26. BALDASSARRI, Monica, Museo Civico di Montopoli in Val d'Arno, Italy

The overstriking on Italian medieval coins: a taxonomy and some possible motivations (poster)

Until recently the overstrikes on coins of late medieval Italian mints were a sparsely attested phenomenon. Only in the latest years the in-depth study of the small denominations of late medieval age (*denari*, *quarti di denaro*, *quattrini* e *petachine*) revealed new interesting examples of this practice. This contribution analyses some fresh data on the subject, offering a taxonomy of the different types encountered, as well as their geographical distribution in Italy and their chronology. On that basis, the different motivations behind this solution are presented, highlighting the possible relationships with the economic, political and cultural societies in which these overstriking were implemented.

27. BALDI, Elena, University College London, United Kingdom

Online catalogue of the Ostrogothic coins at the British Museum

In 2010 I had the chance of a six-month internship at the Coins and Medals Department of the British Museum. The nature of the project was that of updating the 1911 Wroth catalogue of the coins minted by the successor kingdoms of the Roman Empire, Ostrogoths, Vandals and Longobards, dating to AD 476-552. In the past, acquisitions and new arrivals at the museum were recorded and entered in manuscript registers; each was given a paper ticket that was placed with the coin itself, and invaluable starting point for any research. The British Museum collection has now been catalogued according to the new standards set by most recent research, but most of all several steps have been undertaken to create an online catalogue that is available to general public and fellow researchers, also incorporating more recent acquisitions. The first collection to go online brings together 322 coins minted under Odovacar and the Kings of the Ostrogoths. The catalogue provides the history of the collection, an introduction to the coinage and an aid to the identification of coin types, which create an almost complete picture of all known emissions. Also some unrecorded or unknown productions are included, creating grounds for further analysis and scholarly discussion. It is wished that this tool could also be extended to include the coins from collections belonging to other museums, but could also be implemented by the inclusion of coins from the archaeological record that create an important source of information for the study of this period.

28. BALDI, Elena, University College London, United Kingdom

Le produzioni "saloniane" dagli scavi di Classe (Ravenna) (poster)

Gli scavi effettuati a Classe (RA) nell'area portuale e nell'adiacente Basilica di San Severo (2001-2014) hanno fornito un'occasione di studio quasi senza precedenti, per quello che riguarda la circolazione monetale del territorio. Spiccano fra i materiali rinvenuti, alcune emissioni di rilievo, quali le produzioni della discussa zecca di Salona (Croazia) che furono coniate con nominali di *folles*, $\frac{1}{2}$ *folles* e $\frac{1}{4}$ di *folles*. Sul diritto si trova inizialmente il busto di profilo di Giustiniano I, seguito dal cambiamento della posizione che diventa frontale, mentre sul rovescio viene collocato il segno di valore M, K oppure I, dentro un semplice cerchio lineare, senza anno di coniazione o alcun segno di zecca. L'attribuzione a Salona, suggerita inizialmente dal numismatico croato Bakota e in seguito sostenuta anche da Bellinger e Hahn, è supportata dal ritrovamento di materiali, particolarmente tesoretti rinvenuti in Croazia e nelle aree limitrofe. L'attribuzione alla zecca di Salona, già messa in dubbio da Hahn stesso, non tiene conto però dei rinvenimenti già registrati in passato nell'Italia Nord-Orientale, ai quali si aggiunge il numero piuttosto sostanzioso di Classe e San Severo, più di 70 esemplari. Questi nuovi reperti numismatici sembrerebbero potere sostenere l'ipotesi di una produzione molto ravennate, secondo una tesi suggerita da Arslan, ma valutata anche dallo stesso Hahn, il quale ha notato come lo stile delle produzioni sia molto simile a quello della zecca di Ravenna.

29. BARBATO, Marta, University of Warwick, United Kingdom

The assemblage of Roman Republican coins from the 20th cent. excavations of the Sacred area of Largo Argentina (Rome): revision and new data in the light of a recent research

Roman Republican coins found during the early 20th century excavations of the Sacred area of Largo Argentina, nowadays kept in the Medagliere Capitolino, have already been published partially by P. Calabria (2000). The study of the whole Roman Republican coin assemblage kept in the Medagliere Capitolino, undertaken as a PhD research project, led me to re-examine the sample from Largo Argentina. Comparing to the already published coins, other Republican specimens has been added (coins which lied not classified in the Cabinet yet labelled with their "Argentina" provenience) to the assemblage. It is made up of ca. 90 Roman Republican coins (mainly bronze) found in one of the very few Republican preserved contexts in the city. Through the study of archive files (excavation journals etc.) kept in the "Archivio della X Ripartizione del Comune di Roma", it has been possible to acquire new and more precise data about the contexts and the find spots of almost every single coin. Moreover, the discovery of an handwritten document by the official appointed to the excavations at the time (1930's-1950's), G. Marchetti Longhi, gave the proof for the hoard of 19 silver coins (late 2nd-early 1st cent. BC) with its archaeological context of discovery beneath one of the structure in the West side of the area.

30. BARDIN, Thomas, Université Lumière Lyon 2-HiSoMA, France - **BLET-LEMARQUAND, Maryse**, IRAMAT-CEB, CNRS Université Orléans, France

Le monnayage impérial (238-253 ap. J.-C.): nouvelles analyses

Cette présentation développe les résultats des analyses métalliques effectuées par LA-ICP-MS ou par ANRC, sur cinquante antoniniens et médaillons émis entre 238 et 253 ap. J.-C. La composition des antoniniens révèle d'abord une relative stabilité du titre sur l'ensemble de la période au sein de l'atelier de Rome, auquel on peut attacher plusieurs émissions jusqu'à présent incertaines, par homogénéité de composition. Les monnaies attribuées à Antioche se distinguent en revanche par leur teneur en zinc, ainsi que par une plus forte hétérogénéité de composition entre chaque règne. La composition des médaillons, majoritairement bimétalliques, révèle une source et donc une production commune avec les antoniniens de Rome, comme cela avait été déjà constaté pour les frappes tardives, tandis que les rares médaillons monométalliques semblent indiquer un approvisionnement secondaire. En complétant ou en réévaluant les analyses antérieures, ces nouveaux résultats attestent d'une stabilité de la production et de la composition monétaire centrale, au moins jusqu'au désastre militaire d'Abritus et l'avènement de Trébonien Galle, à partir duquel les manipulations deviennent significatives.

31. BARKAY, Rachel, Hebrew University, Jerusalem, Israel

Changing Depictions of the Nabataean Kings' Portraits

The Nabataean kings usually depicted their portraits on the coins, except for the proto Nabataean anonymous ones. There are Nabataean coins on which different depictions of a king appeared in the same year of issue, a phenomenon that has to be explained. The appearances of kings changed in the course of time, but there are changes that may took place due to foreign influence, or maybe the king depicted on his coins a portrait of altogether a different monarch. With the help of the legends and the dates on the Nabataean coins, and with larger repertory of exemplars now at our disposal, it is possible to sort out the coins in an updated way and to seek for the possible reasons for some of the different portraits of the Nabataean kings. The updated inner chronology, with the help of the sorted portraits of the kings, allows also suggesting a relative chronology for some of the undated coins.

32. BASERI, Zohreh, Iran

New excavation Achaemenid coin

The first coin minted in Iran was during the reign of Darius I, from the Achaemenian dynasty (521-486 BC). These coins were of gold and silver and were named Darics or Siglos. Darics were 8.41 grams and siglos were 5.60 grams in weight. On the obverse there is a picture of the king portrayed as a Persian archer pulling his bow and kneeling as though worshiping the God, Ahura-Mazda and on the reverse there are several impressions. Through Achaemenid Iran, royal mints according to financial need of coins, commanders or satraps near to kings received more salary from royal treasury for minting. The method of minting was that pieces of gold, silver or copper with a specific weight were placed between dies and the impression was conveyed to the metal with a hammer. Dies were made from a hard metal like copper, or ironed and the desired motifs or inscriptions were carved in inverse. Normally all the major cities and centers of the country had mints. On occasions of victories, or different celebrations, special coins were minted as medals or commemorative pieces. The coins usually identified as the regal issues of the Achaemenid Persian kings are pieces with royal-archer obverse types and incuse reverse, conventionally termed gold darics or silver *sigloi*.

33. BATESON, Donal, Hunterian Museum, University of Glasgow, United Kingdom

Dr. Hunter and the Prince of Torremuzza's Sicilian Coins

The Prince of Torremuzza was one of Sicily's leading 18th century antiquarians and a pioneer in the study of Sicilian coins. He sold his collection to the London lawyer and eminent coin collector Matthew Duane who in turn sold his entire collection to Dr. William Hunter in 1776. A study of Torremuzza's catalogue published in 1767 suggests the majority of Hunter's Sicilian coins come from this source.

34. BECKER, Jan-Erik, Staatliche Kunstsammlungen Dresden, Germany

Die Rekonstruktion des Brakteatenfundes bei Leipzig. Ein Beitrag zur Münzgeschichte des Osterlandes am Übergang vom 13. zum 14. Jahrhundert

Den Archivalien des Münzkabinetts Dresden ist zu entnehmen, dass im Herbst des Jahres 1831 in einer kleinen Stadt, unweit von Leipzig, ein mittelalterlicher Münzfund entdeckt wurde. Bei den aufgefundenen Münzen handelte es sich um einseitig geprägte Pfennige, sogenannte Brakteaten. Sie sollen in einem sehr schlechten Erhaltungszustand gewesen sein, so dass der Großteil von ihnen eingeschmolzen wurde. Von den ehemals 66 verschiedenen Brakteatentypen des Fundes, gab Carl Friedrich von Posern-Klett nur 11 Typen als Dubletten an das Münzkabinett Dresden. Weitere Exemplare des Fundes aus seinem Nachlass werden in der Münzsammlung der Universitätsbibliothek Leipzig aufbewahrt. Der um 1300 verborgene Brakteatenfund enthielt den Beschreibungen und Zitaten zu Folge offensichtlich vor allem Prägungen der Markgrafen von Meißen und der Äbte von Pegau. Der Fundort liegt im Osterland, einem Teil der 1265 von Markgraf Heinrich III. von Meißen (1221/30-1288) unter Anmaßung königlichen Rechtes für seinen Sohn Dietrich neugeschaffenen Markgrafschaft Landsberg. Die Stadt Leipzig als aufstrebender Handelsmittelpunkt spielte für die neuentstandene Markgrafschaft eine bedeutende Rolle. Der Vortrag schließt mit einem Einblick in die Münzprägung der Markgrafschaft Meißen, speziell des Osterlandes am Übergang vom 13. zum 14. Jahrhundert.

35. BECKMANN, Martin, McMaster University, Hamilton, Canada

The Chronology and Iconography of Hadrian's Coinage, AD 134-138

The coinage of the last four years of Hadrian's reign (AD 134-138) is characterised by an obverse bearing the legend HADRIANVS AVG COS III PP combined with a variety of reverse types bearing descriptive legends. The best-known of these reverses is the famous province series, but it also includes many other types such as personifications, gods, and records of vows and *congiaria*. The coins themselves offer few clues to their internal chronology and there is significant disagreement as to how they should be dated. This paper presents the results of a die study of the gold coinage of this period and its implications not only for the dating of these coins, but also for understanding the significance of their iconography. The modifications to existing chronologies are significant; for example the types "*Hispania*", "*Genio P.R.*", and "*Liberalitas VII*", dated by Mattingly (BMCRE III: cxliv) to early, middle and late in the period respectively, are shown to be contemporary and presumably all late. The provision of a sound chronology also allows each type to be evaluated in the context of the others to which it is linked and with which it presumably formed a coherent iconographic group. Finally the new chronology of the gold coinage provides a basis for a re-evaluation of the chronology and iconography of the silver and bronze coinage.

36. BELIEN, Paul, Central Bank of The Netherlands

A new sixth century solidi hoard from The Netherlands

In January 2014 two metal detectorists discovered 47 gold coins in a field in the province of Drenthe, The Netherlands. The hoard consists of Late Roman, Byzantine, Ostrogothic and Frankish *solidi*, including a rare piece struck for Theodebert I (534-548). As far as the weight of the coins go, this is the largest sixth century gold hoard ever recorded in The Netherlands. Although an archaeological context is missing the coins can shed new light on the functioning of (inter)regional networks in the southern North Sea region in the early medieval period.

37. BENDERS, Jos, University of Leuven (KU Leuven), Belgium

Who were they? A prosopographic study of medieval mint masters in the Duchy of Gelre (1367-ca 1460)

Medieval mint masters were entrepreneurs. In commission of an authority with the (actual or pretended) right to mint, they minted for a certain period. It was the mint master's task to organize the production. To make the business profitable, various activities had to be organized. These include buying raw material, hiring staff and having dies engraved. The highly technical nature of coin production required in-depth knowledge of metallurgical processes. Another key activity was commercial: acquiring precious metal, often in the form of existing coins which were not or no longer considered valid. In addition, sufficient working capital was needed to invest in raw materials and other necessities. These requirements make it clear that not just everybody could become mint master. At a minimum, the mint master has to be able to organize the requisites. This paper aims to provide a beginning of an answer to the backgrounds of mint masters. The empirical data come from the Duchy of Gelre, a medium-sized Duchy located in what is now The Netherlands. Based on archival data and to the extent possible,

the mint master in the period 1367 – ca. 1460 are identified and data are presented on their backgrounds. These are analyzed in order to get a broader view of the studied population.

38. BERGER, Frank, Historisches Museum Frankfurt, Germany

Maximinus Thrax und die Münzen der Schlacht am Harzhorn (AD 235)

Mitten in Germanien, am Gebirge des Harz nördlich von Göttingen, wurden seit 2008 an einem Bergsport Funde römischen Militärs geborgen: Angriffswaffen, Katapultbolzen, persönliche Ausrüstung, Werkzeuge, Wagenteile, Pferdezaumzeug und Schuhnägel. Maximinus Thrax wurde im März 235 bei Mainz zum Kaiser ausgerufen. Es scheint, dass wir hier seinen ersten Feldzug nachweisen können, der noch im Sommer 235 stattfand. Die römischen Münzen, insgesamt 16 Stück, stellen eine kleine, aber bedeutende Fundgattung dar. Im Zuge der Sondierungen traten zwei Sesterzen, dreizehn Denare und eine Kupfermünze aus Nikaia in Bithynien zutage. Alle Münzen sind Einzelfunde. Von erheblicher Bedeutung für die chronologische Einordnung der Geschehnisse am Harzhorn ist das Prägedatum der Münzen. Bei den Bronzemünzen ist nur ein Sesterz des Commodus (180-192) bestimmbar. Die Denare stammen von Septimius Severus, Elagabalus und Alexander Severus. Die jüngste Münze, ein Denar des Alexander Severus, wurde ab 225 geprägt. Die Kupfermünze aus Nikaia trägt das Bild des Severus Alexander (222-235). Sie ist ein gewisser Anhaltspunkt dafür, dass es Verlegungen von Truppeneinheiten aus dem Osten in den Westen gab. Auf dieser Basis kann eine Einordnung der Funde am Harzhorn zwischen den Jahren 230 und 238/240 als sicher angenommen werden. Die Wahrscheinlichkeit spricht dafür, daß die Schlacht am Harzhorn noch im Sommer/ Herbst des Jahres 235 stattfand.

39. BERTHOLD, Angela, Coin Cabinet, Berlin, Germany

Considerations on the Horses of Maroneia

Maroneia, a foundation of Chios, starts its own emission of coins in the second half of the 6th century BC. The coinage of the Thracian city shows from the beginning horses as obverse type. In the hitherto numismatic research little attention has been drawn on this motif and it has always been interpreted in a very general and unspecific way as a sign for the horse breeding as one of the city's most important sources of revenue and wealth. A more detailed observation of the image of the horse on coins of different cities and in different ways of design leads us to interesting insights not only on the meaning of the emblem and its relevance for the coining city but also to the general use of pictures on coins and the treatment of the coin as a pictorial object.

40. BESSA PUCCINI, Daniela, Universidade de São Paulo, Brazil

Monetary liturgy at Cyrene in the IV cent. BC

This presentation is aimed at discussing the role of the person names in the monetary legend present on coins of Cyrene during the IV c. BC. Some irregularities in the analysis of die links, reuse of dies to produce coins in the name of more than one person and the absence of names on dies linked to emissions with name point that these names do not follow a succession of magistrates charged at regular intervals and reinforce the hypothesis that these are related to people who donated metal for the monetary production of the *polis*. Crossing numismatic and epigraphic sources emerge the names are related to aristocratic Cyreneans that assumed important political and military charges during the century and many of them – or their families – participated as benefactors in an important urbanistic restructuring of the Sanctuary of Apollo and the other sectors of the city.

41. BHATIA, Pratipal, University of Delhi, India

Kushano-Sasanian, Nezak Huns (Hunas), Sasanian, Hephthalite-Sasanian and Arab-Sasanian coins, currently deposited in the Antiquity section of the Archaeological Survey of India, New Delhi, India

This paper is divided into two parts. Part one deals with four Kushano-Sasanian coins which were found during the excavations conducted at Ahichchhatra in Uttar Pradesh. Images of all the four coins are put on one coin plate along with a map showing the location of Ahichchhatra. Part two deals with the thirty four coins which were acquired by the Archaeological Survey of India (hereafter ASI) in August 1948 from Mr. R.C. Batra who was a school teacher in the Government High School, Ludhiana in Punjab. The exact provenance of these thirty four coins and the circumstances of their find are not known to us. The weights, size and metal of all these coins are given in the coin registers of the ASI. The images of all these coins are provided to us by the ASI for which we convey our sincere thanks to the concerned authorities. Among

these coins five coins belong to the Nezak Huns; one coin is Hephthalite Sasanian and four coins are Arab-Sasanian issues. The rest of the twenty four coins belong to the Sasanian emperors of Iran. I have discussed some of these coins with fellow numismatists from different countries to get their opinion. The study of these coins is of significant value for the study of political, economic, social and cultural contacts between the Indian sub-continent, Iran, Afghanistan and other Central Asian countries.

42. BILIĆ, Tomislav, Archaeological Museum, Zagreb, Croatia – **NAD, Miroslav**, Archaeological Museum, Zagreb, Croatia

Coin circulation 3rd c. B.C. – 31 B.C. in North-Western Croatia

The paper will in the first place analyse in detail all Pre-Imperial individual coin finds (that is, the coins issued before or in 31 B.C.) recovered from the area of modern North-western Croatia, more or less corresponding to the area of later province of Pannonia Savia. In the same time, the corresponding hoards, composed of the same types of coins, found in this region will also be discussed. The rich site of Segestica, Roman Siscia/modern Sisak, yielded the largest number of finds, but other less-known sites also contributed to the general picture of coin circulation in the area. The vast majority of coins are stray finds, while only several specimens were recovered during archaeological excavations. The largest number of specimens are Roman Republican coins, but Celtic coinage is also represented in significant numbers, especially that of the Taurisci. The newly published data, however scanty, allows a revision of some current conclusions with respect to the distribution of certain coin types, as well as a balanced discussion on the coin circulation in this region in the given period.

43. BIRCH, Thomas, Goethe-Universität, Frankfurt am Main, Germany

The character of coinage and development of bullion sources across the Western Mediterranean from the 5th to the 1st centuries BCE: the summary results from two years analytical research

How did the historical trajectory, which led from a politically fragmented Western Mediterranean to one subjugated and controlled by Rome, influence the bullion sources available for coin production? Several hundred silver and bronze coins have been analysed to trace continuity and change in metal supply networks from the earliest coinage (later 6th century) to the Roman Republic on the Eve of the Social War (early 1st century). These have been selected from numerous mints representative of the multiple cultural spheres under investigation (Greek *poleis*, Punic foundations, indigenous groups, and Rome itself). The targeted approach carefully selected coin series that coincided with key historical and numismatic developments (e.g. changing alliances of Sicilian cities in the 4th and 3rd centuries and the incorporation of Greek *poleis* in Southern Italy into the Roman sphere of influence). The evidence presented enables a revised understanding on the nature of power relations in the geopolitical arena, incorporating the analytical results into the wider archaeological and historical framework. Coins were sampled from several university and museum collections by drilling. The drillings were first analysed for their bulk metal composition (EPMA) and then for their trace element composition (LA-ICP-MS). Lead isotope analysis was performed on the coin samples to provenance their bullion sources, with copper isotopes also measured to monitor variability within groups. All data was rigorously investigated (multivariate statistics). Special emphasis was made on the use of appropriate reference materials to ensure reliable results and promote their comparability for future studies (a pertinent issue for silver).

44. BLAND, Roger, The British Museum, London, United Kingdom

Too much information? Making sense of hoards from Britain and the Continent in the later 3rd century AD

Over 2400 hoards that close with coins issued between the reintroduction of the radiate in 238 and its replacement by the nummus of Diocletian are known from Britain, Gaul and Germany, a greater concentration than in any other part of the Roman Empire. Traditionally outbreaks of hoarding are seen as a sign of threat, either from external invasion or internal unrest, although this interpretation has been increasingly questioned. It is true that during this period there was a rapid turnover of short-lived emperors and twice parts of the area came under the separatist control of the Gallic and then the British empires, while the coinage itself underwent debasement and reform and these are all likely to be factors behind the hoarding. However, the archaeological evidence from Britain does not show the same pattern of damage and destruction that is seen on the Continent and the recent discovery of the Frome and Beau Street hoards has prompted us to question what lies behind the burial of some of the very large hoards that occur during this period. The research project, 'Crisis or continuity? Hoards and hoarding in Iron Age and Roman Britain, with special reference to the 3rd century AD', carried out by the British Museum

and the University of Leicester, is the first systematic attempt to study the contexts of these hoards in order to understand better the reasons for their burial and this paper will draw out some key themes from this study.

45. BLÁZQUEZ CERRATO, Maria Cruces, Universidad de Salamanca, Spain

Circulación monetaria en el territorium de Regina Turdulorum (Casas de la Reina, Badajoz, España)

La catalogación del material numismático procedente de las excavaciones realizadas en el territorium de esta antigua ciudad, así como el análisis de una colección de monedas de un particular del actual municipio de Casas de la Reina (Badajoz) procedentes de hallazgos esporádicos, nos ha permitido conocer la conformación y evolución de la masa monetaria entre los siglos II a.C. y V d.C. En este sitio de la Baeturia céltica hubo un primer establecimiento tardorrepublicano con su propia ceca, y una ciudad imperial acompañada de varios asentamientos rurales próximos. La muestra estudiada proporciona un primer avance sobre la procedencia de las series hispanas y las extrapeninsulares y también de los niveles de circulación a lo largo de esta amplia etapa.

46. Removed.

47. BODZEK, Jarosław, Jagiellonian University, Poland

New finds of moulds for casting coin flans at the Paphos agora

The *agora* of ancient Nea Paphos has been investigated by an expedition from the Institute of Archaeology at the Jagiellonian University led by Ewdoksia Papuci-Władyka since 2011. The aim of this research is to verify the hypothesis that a Greek *agora* from the Hellenistic period existed on the site of the later Roman *agora*. During the 2014 season, three fragments of moulds for casting coin flans were discovered. All of the moulds were made of local limestone and were only partially preserved. Two of them were discovered in Trench III in a rubbish heap that was probably part of a layer created when the *agora* was levelled in Roman times. They are one-sided moulds that were used to cast coins with a diameter of around 17 mm and it is possible that they both originally were part of the same mould. The third fragment was discovered during investigation of a covered well shaft dated using pottery fragments and coins to the Late Hellenistic period. The mould is two-sided and was used to cast coins with a diameter of around 30 mm. Naturally, similar moulds used in minting had previously been found in other sites at Paphos. Nevertheless, the moulds found at the Paphian *agora* represent an interesting and important addition to the previously discovered material.

48. BODZEK, Jarosław, Jagiellonian University, Poland - **KOPIJ, Kamil,** Jagiellonian University, Poland – **SMAGUR, Emilia,** Jagiellonian University, Poland

Finds of Roman Coins in Poland – Lesser Poland. Preliminary Report (poster)

Finds of Roman Coins in Poland – Lesser Poland is part of the larger *Finds of Roman Coins in Poland project*, led by Professor Aleksander Bursche of the University of Warsaw and financed by the National Fund for the Development of Numismatics. Its timescale runs from 2013 to 2017. The team working on finds in Lesser Poland includes Jarosław Bodzek, Kamil Kopij, Emilia Smagur, Jerzy Kliś and doctoral students studying at the Department of Classical Archaeology of the Jagiellonian University. The aim of the project is both to collate and verify Roman coin finds that have already been published and to register the discovery of new unpublished finds from the historic territory of Lesser Poland. It should be noted that not only finds made during archaeological research will be incorporated into the project, but also information gleaned from library and archive study and coins discovered by chance by ‘detectorists’. This project will result in the creation of an interactive database of finds, as well as the publication of an inventory in book form. The initial results of work carried out up until June 2015 are presented here.

49. BOMPAIRE, Marc, Centre Ernest Babelon CNRS, France

Piéferts médiévaux. Origines et fonctions d'un objet monétaire

Les pièces frappées sur flan épais sont un objet de gratification bien connu dans la documentation de la France à l'époque moderne. L'apparition de ces objets au Moyen Âge et leur diffusion, en France, en Angleterre ou en Espagne surtout, restent

peu étudiées. Cette étude vise à poser les premiers jalons d'une enquête qui devra être collective et comparative au plan international sur ces objets, pour esquisser un corpus des exemplaires, des lieux de découverte, mais aussi des textes et contextes qui peuvent éclairer leur fonction et leur destination, au sein du processus de l'émission monétaire ou pour le contrôle de la circulation. Elle s'appuie sur une série d'analyses métalliques menées par A. Teboulbi dans son doctorat (2011) qui permettent d'écarter ou d'appuyer certaines hypothèses sur leur fonction de modèle pour les types, les titres sinon les poids des monnaies courantes, en particulier dans le cadre d'une politique monétaire des princes, à commencer par le roi de France.

50. BONANNO, Maurizio, Palermo, Italy

La monetazione 'locale' di Messina

Lo studio tratta dell'individuazione delle inedite monete "locali" coniate dalla città di Messina nel XV secolo. Questa monetazione si distingue nettamente in tre periodi: - sotto Alfonso V d'Aragona, intorno al 1440/50; - sotto Giovanni, nel 1474; - sotto Ferdinando II il Cattolico. La monetazione meglio rappresentata è quella del 1474 con una serie di quattro tipologie e con legende di grande valenza storico-numismatica. Alle monete di questo periodo si è tentato di attribuire il loro "valore nominale" e il "peso teorico". Nella monetazione effettuata durante il regno di Alfonso V ritroviamo una rarissima ed enigmatica moneta apparsa nel Catalogo di vendita della Coll. Sambon (1897) dove era assegnata al periodo dell'Interregno 1409-1412. La monetazione effettuata durante il regno di Ferdinando II il Cattolico risulta la meno documentata, ma sempre di grande interesse per le nuove tipologie che presenta. Conclude lo studio una analisi comparativa delle tre emissioni "locali" messinesi che pone in evidenza aspetti molto significativi e particolari di questa eccezionale monetazione.

51. BONOUS-SMIT, Barbara, Queensborough Community College, City University of New York, United States of America - **HAHN-BENGE, Elizabeth**, formerly American Numismatic Society, New York, United States of America

International Numismatic Libraries

Numismatic libraries have been in existence for centuries. Yet, very little has been written about them and very few studies have been conducted. This paper presents a comprehensive and informative study on international numismatic libraries. Numismatic libraries play a vital and essential role in supporting numismatic research. Their collections usually consists of all the essential books, periodicals, catalogues, including auction catalogues, manuscripts, and other resources needed for numismatic research. But these libraries often remain hidden behind the parent organization. The first part of this presentation is a retrospective on the International Numismatic Libraries' Network (INLN) that was founded in October 2009 by Ans ter Woerds, librarian at the Geldmuseum (Money Museum), Netherlands and Elizabeth Hahn, librarian at the American Numismatic Society. They surveyed international numismatic libraries in order to study and evaluate the current conditions of these libraries. General information about the libraries, their collections, services, accessibility, networks and networking were the main focus. The results were presented at the International Numismatic Congress in September 2009 in Glasgow, Scotland. A current update on these libraries will be presented. The second part of this presentation focuses on a recent study of forty international numismatic libraries from national coin cabinets, museums, independent national organizations, specialized collector organizations, and general research collections with holdings of extensive numismatic literature. Survey were used between 2011-2013 to gather information about the libraries including staffing, history, research holdings and collections, policies, usage, accessibility, automation, classification systems and cataloging, and overall organization of their collections.

52. BORBA FLORENZANO, Maria Beatriz, Museu de Arqueologia e Etnologia - University of São Paulo, Brazil - **LO MONACO, Viviana**, Museu de Arqueologia e Etnologia - University of São Paulo, Brazil - **GIANEZE RIBEIRO, Angela Maria**, Museu Paulista - University of São Paulo, Brazil

Roman Coins in the University of São Paulo – Brazil (poster)

This poster intends to present to the Academic and Scientific public the Collection of Roman Republican and Imperial Coins kept in the University of São Paulo, Brazil. These collections were formed mainly in the beginning of the XXth century and comprise about 800 coins. A printed catalogue has been prepared and edited by the authors as well as published by the University. It is our intention to present the Catalogue during the Congress.

53. BÖRNER, Susanne, Universität Heidelberg, Germany

The Centre of Excellence for Ancient Numismatics, Heidelberg

The speech should make obvious the targets and options of the Centre of Excellence for Ancient Numismatics located at the University of Heidelberg. In the context of the Centre of Excellence for Ancient Numismatics a collection database and a coin find database, which are linked together, had been developed. The databases are geared to the needs of the regional and supraregional cooperation partners. The specific query mode enables a straight, purposeful evaluation of the coins for particular issues. The output follows as diagram, list or in maps. A research project will be realized together with the majority of the cooperation partners within the next one and a half years. It contains the question about the composition of late antiquity coin finds on both sides of the Rhine in the vicinity of Heidelberg and especially if there is a change in this composition after the collapse of the *limes germanicus* as a boarder of the roman empire and the loss of all territories east of the upper Rhine after 260 A.D. The research will be based on the coin find database developed for the Centre of Excellence.

54. BOUHIER, Mickael, CNRS UMR 3299 NIMBE – LAPA, France – **MEAUDRE, Jean-Charles**, CNRS UMR 5060 IRAMAT- LMC, France - **TEREYGEOL Florian**, CNRS UMR 5060 IRAMAT- LMC, France – **DIEULAFAIT, Francis**, France – **MARIAN, Jérôme**, France - **LE QUELLEC, Vincent**, France

New support for studying and identifying the monetary objects stemming from excavations and collections (poster)

The coins brought to light during archaeological excavations represent a very important source of information on the economic relations in addition of bringing the elements for dating. However, it is rare that the coins and other monetary items such as molds or blanks are easily readable and at best, after restoration, they could be entrusted to a numismatist. Beyond this issue, another problem occurs frequently: the archaeological item cannot circulate so freely as the archaeologist for physical and legal reasons. Today the development of numerical shooting and the increase of computers calculation ability bring a simple and a cheap solution to this limitation. The development of freeware RTIbuilder and RTIviewer, set up by the CNR (Italian National Research Council, see www.culturalheritageimaging.com) for the second, led to the realization of a lighting system managed artificially. From our part, we developed a tool for shooting of reduced size items. The aim of this work was to create a system allowing easier circulation of historical and archaeological information. Thus we shall present the system worked out with the first results taking as example the following items of archaeological excavations: a medieval coin and an antique monetary mold. We shall also estimate the saving of time, the limits of the tool and propose new.

55. BRACEY, Robert, The British Museum, London, United Kingdom

How rapid was ancient coin production? The contribution of die studies

The distinction between the volume of coin production and the intensity, or rapidity, of production is important. Die studies are our principle method for understanding ancient coin production but until recently have been employed mainly for statistical meta-die analysis to calculate the total outputs of mints. This paper will focus attention on the problem of how rapidly ancient coins were made. In particular it will compare graph theory inter-die methods for solving the workstation problem – how many work-stations were used simultaneously. Several methods have been used in recent studies of rates of production and have offered widely divergent results. The graph theory methods can be justly criticized for failing to offer differentiation of productions greater than three work-stations (the non-planar graphs). The author will offer a method for examining operations potentially exceeding three work-stations. In addition, as this is a new field, the limits of the techniques will be examined (particularly the comparability and representativeness of examples drawn from Sicily to Northern India).

56. BRACEY, Robert, Beyond Boundaries Project, The British Museum, London, United Kingdom

The Late Kushan Coinage (poster)

After the death of Vasudeva I the Kushan Empire ceased to control Bactria and was restricted to regions south of the Hindu Kush. In this period it is known to us primarily through its coinage. This paper will present important new results in the study of this coinage in recent years integrated into the wider problems of third and fourth century AD history. The increasing levels of production in gold coinage from the time of Vasishka will be combined with evidence on the debasement of gold to explore the economic pressures that faced the reduced empire. New attributions of copper coinages to the late Kushan kings will be combined with results in the related Kushanshah, Kota, Naga, and Kidarite dynasties to explore the circulation of low value coinages in Northern India.

57. BRANSBOURG, Gilles, American Numismatic Society, New York, United States of America

The Currency Rates of the Roman Republic

The Second Punic War witnessed the creation of the *denarius*, a silver piece weighing initially 4.5 grams. It purchased 10 bronze asses, hence its name and the mark of value X it bore. Although the weight standard of the bronze coinage fluctuated widely during the war, it stabilized at 35-45 g per as by the beginning of the 2nd century BC, valuing a gram of silver at c. 100 g of bronze. Bronze weight standard drifted lower then, reaching a range of 25-30 g by the mid-2nd century BC. This is when marks of value suddenly changed on denarii: XVI replaced X for several coin series in c. 141/0 BC, followed by X, before both alternated for several decades and finally almost vanished by the end of the century. This is when the bronze coinage would have been devalued from 10 to 16 asses to the *denarius*. Nevertheless, this reconstruction does not resist to thorough metrological and statistical observations. Rome produced its official bronze coinage according to several weight standards between 140 and 82 BC, implying that light and heavy bronze series did not enjoy necessarily a single and unique conversion rate vs. the *denarius* at all times but that several rates coexisted at some point. We will demonstrate that an increased supply of silver triggered that period of instability and monetary inflation, in the context of a global shift from bronze to silver as the main monetary metal used by the Republic.

58. BREITSPRECHER, Victoria Johanna, Austria

Is it safe there? Asylum coinage and their typology

This paper deals with the issue of asylum and asylum law on coins. Also the thesis will be displayed, that there could be an unliteral icon for asylum, an iconographic and nonverbal chiffrage, which had been understood without reading by people living in the ancient world. I have compared all coins in the RPC I and II, covering the time from the death of Caesar to Domitian, and have come to the conclusion, that only cities with known asylum rights struck coins with the particular type showing a cult statue in a temple - while cities, that minted a temple without a cult statue in it, had no asylum rights. To understand this, we have to look further into the definition of asyilia, hiesia and the neocoric cult, that was always bound to asylum rights. The touching of the statue or at least the reaching of the temple's sacred temenos was the ancient asylum application, so the statue is more than the personified god or goddess, who granted safety, it is also the symbol for the untouchability within the symbolic temple. Although every engraver had his own creative vein, the pictures were limited to convention. As a picture of the temple features more specifications like the landscape, a very symbolic temple could stand for something more theoretic, much like a modern pictogram.

58 bis. BROGGINI, Matteo, Italy - **MANENTI, Angela Maria**, Museo Archeologico Regionale "Paolo Orsi", Siracusa, Italy

Il tesoro di Siracusa: fiorini e ducati d'oro nella Sicilia del XIV secolo (poster)

Con questo poster si presenta un tesoretto composto da fiorini di Firenze e ducati di Venezia, rinvenuto nella città di Siracusa nel 1938, unica testimonianza numismatica fino ad oggi di monete di questo tipo in Sicilia. Il ripostiglio, occultato appena dopo il 1370, offre uno spaccato della circolazione delle monete d'oro durante la guerra tra Federico IV e Giovanna I d'Angiò.

59. BROUSSEAU, Louis, Numismatique Louis Brousseau, Canada

Agathocle, la Grande Grèce et le triskèle

Il y a un siècle C.T. Seltman avait attiré l'attention sur les liens à établir entre Agathocle et certains monnayages de Grande Grèce. S'appuyant sur la présence d'un triskèle sur des monnaies de Terina, Métaponte et Velia, il avait suggéré qu'Agathocle était à mettre en relation avec ces émissions, soit en tant que souverain, soit en tant qu'allié. Cette hypothèse rencontra un certain succès mais ne fait toujours pas l'unanimité. Certains ont maintenu que le fondement d'une telle hypothèse sur la seule présence d'un symbole ne peut revêtir l'interprétation que lui donne Seltman. Cependant les arguments qui contrent l'hypothèse de Seltman ne sont pas convaincants et seuls de nouveaux éléments pourront faire la lumière sur le lien possible entre Agathocle et ces monnayages de Grande Grèce. Notre présentation propose de réexaminer le matériel et de proposer à l'aide de la métrologie des arguments plus décisifs.

60. BRUNI, Stefano, Italy

Un AE3 ibrido di Attalo: nuova luce sulla datazione della serie Urbs Roma Felix

Le osservazioni di J. P. C. Kent sulla datazione al 404-410 d. C. della serie monetale *Urbs Roma Felix* dell'imperatore romano d'Occidente Onorio, proposte già nel 1988 (RIN 1988, pp. 281-284) e ribadite successivamente nel RIC X (pp. 130-131) trovano oggi un'ulteriore conferma. La recente scoperta, tra il materiale numismatico del Medagliere Capitolino denominato "sottosuolo urbano 2", di probabile provenienza dagli scavi municipali urbani di Roma, di una moneta con il dritto dell'unica emissione in bronzo di Prisco Attalo (*Victoria Romanorum*, RIC X, pp. 138-141 e p. 345, nn. 1414-1415) e il rovescio della serie *Urbs Roma Felix*, rivela uno stretto legame tra le ultime fasi dell'emissione di Onorio e quella di Attalo. L'esigua durata del regno di Attalo (novembre 409 – giugno 410 d. C.) consente perciò un saldo aggancio temporale alle ultime fasi della serie di Onorio. L'ulteriore scoperta, all'interno dello stesso materiale, di altri due ibridi, inversi rispetto al precedente (al dritto Onorio, al rovescio *Victoria Romanorum* di Attalo), avvalorà l'ipotesi di un utilizzo erroneo o frettoloso di coni appartenenti a una serie appena dismessa, nel contesto di un'emissione caratterizzata da errori e trascuratezza.

61. BRUNI, Valerio, Università di Roma 'La Sapienza', Italy

La moneta provinciale in Spagna durante la guerra sertoriana (82 a.C.-72 a.C.)

Nell'ambito dello studio sulla monetazione provinciale repubblicana, un caso particolare è costituito dalla coniazione spagnola del periodo sertoriano. In un quadro storico particolare che vede, nel contesto dello scontro tra Mario e Silla, fronteggiarsi per la prima volta romani contro romani, si inserisce la genesi di una nuova tipologia monetale: la moneta imperatoria. Questo tipo di coniazione, emessa da pro-magistrati romani *cum imperio* nelle province da loro controllate, rappresenta uno spartiacque nella gestione delle zecche esterne a Roma, siano esse zecche mobili o provinciali. In occasione di questa guerra, contraddistinta, da ambo le parti, da una costante mancanza di denaro per pagare le truppe e le spese militari, si inseriscono le monetazioni dei generali romani inviati contro Sertorio, nonché le coniazioni delle città iberiche, ad alcune delle quali sarebbe stato nuovamente concesso di emettere moneta. Nel primo caso ci troviamo di fronte ad una monetazione "ufficiale", firmata da *imperatores*, che scandisce l'inizio – C. Annio Lusco – e la fine – Q. Cecilio Metello Pio e Pompeo Magno – dello scontro con il generale ribelle; in questo caso i generali, o i loro questori, emettono monete con iconografie tese a celebrare la propria ascendenza e le proprie campagne vittoriose, aspetto, questo, che diventerà poi caratteristico di questo genere di coniazioni. Nel caso della monetazione delle città spagnole, invece, si batte moneta per Sertorio o per gli stessi generali romani (come nel caso di Corduba per Metello) riproponendo tipologie arcaiche o ideandone di nuove.

62. BRZIC, Aleksandar, The Netherlands

Against the History? Vienna Mint and its coinages for Serbia and Yugoslavia 1868-1938

Vienna Mint has taken part in the coin and medal production for the Balkan countries of Serbia and Yugoslavia during quite a long time, i.e. 1868-1938. In this time span, numerous coinages have been produced and even more material and technology provided to both countries that did not have their own Mint. Such a long continuity in minting would often imply excellent political relationships between Austria and these countries. This was actually scarcely ever the case: Serbia/Yugoslavia and Austria-Hungary/Austria have an extremely troubled history of interstate relationships, and even have fought a war against each other (at least one military and several economical ones...). How was it then possible to maintain the coinage continuity against this picture of unsettled politics and outright animosity and even warfare? Personal, political, economic and cultural factors have made it possible. The circumstances of this phenomenon "against the general History" are presented and explained in this article.

63. BUBELIS, William, Washington University, Saint Louis, United States of America

A Survey of Eion's Archaic Civic Coinage

Located at the junction of the Strymon River with the northern Aegean Sea, the Greek community of Eion emitted a varied civic coinage of electrum and silver whose complexity and significance have been grossly underappreciated. While many scholars have assumed that Eion was a colony of Thasos and thus struck its coinage upon the Thasian standard, Eion was likely a colony (*apoikia*) of Thasos' own metropolis, Paros. Eion issued its civic coinage on the Aiginetan standard of Paros over a lengthy period of time, commencing perhaps as early as c. 530-520 and lasting until as late as c. 490-480, at which time the standard was reduced, perhaps in connection with Persian or Athenian military operations (for which reason this extra-

civic coinage lies beyond the scope of this paper). Minted in at least seven discrete series, Eion's civic coinage exhibits remarkable consistency in its use of a type that involves waterfowl (perhaps the duck *Tadorna ferruginea*) and a lizard that allude to Eion's location at the mouth of the Strymon River. Silver denominations range as high as a *drakhma* (or 1/3 Aiginetan stater) but the bulk of the coins appear to be Aiginetan *hemihektai* (1/12 stater). Occasional production of electrum coins (equivalent to a silver stater) is attested alongside an extensive range of silver fractions, some as small as 1/48 stater. For most series, the number of obverse and reverse dies appears to be considerably high, and the weights point to extended production such as might occur over many years.

64. BUDE, Ronald, University of Michigan, United States of America

Introducing micro-ct scanning as a tool to identify completely corroded coins

Some bronze coins are completely corroded so that all metal is gone and only a disc of corrosion products admixed with adjacent soil remains. Traditional cleaning methods would not likely help identify these coins; chemical methods would probably dissolve them while mechanical methods might never reveal discernible detail. It was speculated that in such coins higher concentrations of metal salts remain where metal originally was present than in surrounding, more diffused, corrosion products, and that this concentration difference might be detected by high resolution micro-CT, helping to identify a coin. Five coins, two broken, that lacked any metal and were composed solely of corrosion products underwent micro-CT scanning (Nanotom S unit, GE Sensing & Inspection Technologies GmbH, Wunstorf, Germany). Extremely small, 9 micron voxels were obtained which allowed reconstruction of coin slices in any plane. Many slices in many planes were viewed until maximum detail was obtained for each coin. Enough detail was present in two coins, one a $\frac{3}{4}$ fragment, to allow complete identification. One was an *Urbs Roma* bronze and the other a Valerian *antoninianus*. A third coin showed an apparent mid 4th century portrait but could not be further identified. Two coins did not show identifiable detail. These results show that it is potentially feasible to identify completely corroded coins using state of the art micro-CT. It may therefore be possible to date an archaeological context if only completely corroded coins are found.

65. BURNETT, Andrew, The British Museum, London, United Kingdom

Victorious Emperors and a Happy World: a new coin of Zela

A coin which has lain unrecognised in the BM can be identified as an unpublished coin of Zela proclaims that if 'the emperors are victorious the world is happy'. The formula is analysed in the context of imperial acclamations.

66. BURRELL, Barbara, University of Cincinnati, United States of America

Coins from a Well at Caesarea Maritima and the Currency of Fifth Century Palaestina

In July 1994 a University of Pennsylvania excavation team discovered a well that had been dug into the upper courtyard of the Promontory Palace at Caesarea Maritima, likely during the phase when it served as the *Praetorium* of the Roman governor of Syria Palaestina. Deliberately filled in once it went out of service, the objects in the well included pottery, architectural fragments, animal bones, dice, lead curse scrolls, and a considerable number of small bronze coins. In 1998 we published a preliminary analysis of the 24 coins that had been cleaned and studied up to that time. Twenty-two dated to the fourth century, with the latest an issue of Theodosius I dated 383-395. Thus we set a preliminary terminus for the closing of the well at 383 C.E. Further cleaning and study now allow us a more complete evaluation. The terminus of the well is now provided by a minimus of Leo I (457-474), which means that the deposit likely represents a gradual accumulation of small currency used in the area down to 457 CE. Yet out of 98 coins in total, over half are fourth century bronzes and over a third are illegible, while only four coins represent the entire first half of the fifth century. Thus the well deposit from the Promontory Palace bears out the thesis that the currency of fifth century Palaestina included few identifiable coins of its own period.

67. BURSCHE, Aleksander, University of Warsaw, Poland – **MYZGIN, Kirylo**, Karazin University, Kharkiv, Ukraine

The origin of early Germanic coinage

The time, place and circumstances of the origin of the first barbarian gold imitations of Imperial coins in Europe is a highly controversial subject. New evidence confirms that the earliest specimens were minted around the mid-3rd century AD in

Germanic communities in north-western Ukraine and eastern Poland. After the defeat of the Romans at Atritus, the imperial treasury, including *aurei* and gold bars, was captured by the Gothic army. The coins were then pierced, worn as a symbol of belonging to the victorious troops, a mark of distinction and status. Soon the coveted original Roman coins became scarce. Arguably the prestige needs underlie the emergence of the earliest Germanic coinage. Raiding the Balkans and Asia Minor, Gothic troops seized and carried North the apparatus of municipal and colonial mints, possibly mint workers too. Thus minting technologies were mastered by the northern barbarians: gold imitations were made using actual Roman dies original used for minting local bronzes, but modified over time. Germanic societies migrating south and westward keep the tradition of imitation gold coinage, variously resembling their Roman prototypes. In the end of 5th – early 6th century the first monograms and names of Germanic rulers start to appear on the pseudo-imperial coins.

68. BURSTRÖM, Nanouschka Myrberg, Stockholm University, Sweden

Sharing values: creative links and hybridity in an Anglo-Scandinavian techno-web

In present-day Scandinavia a coinage was initiated about AD 995, which imitated contemporary Anglo-Saxon coins. For several decades the English and Scandinavian coinages were closely connected. Humans (commissioners, moneyers, artisans) and objects (e.g. coin-dies) moved between the mints. Coinage is often seen as articulating sovereign rights in a certain area, but the Anglo-Scandinavian coinage network instead cut across kingdoms from west to east. Despite ongoing state-formation processes, key valuables like artisans and dies were shared in the network, causing change in power relations and conceptions of value. By use of different ‘international’ iconographical models, they also created relations with cognitive nodes through association. Imitations are often depreciated out from present notions of authenticity. Here, the material’s creative and hybrid character is instead underlined, using minting technology and iconography to shift the focus to object agency and thus opening up for a deeper understanding of the object’s wider connotations and meanings.

69. CALABRIA, Patrizia, Università di Roma ‘La Sapienza’, Italy

Roma e le province

Nel periodo repubblicano i territori che vengono a contatto con Roma sono già provvisti di moneta propria, Roma tentando di entrare nel mercato economico, si adegua e all’inizio batte moneta di “imitazione”, successivamente entra con la propria moneta d’argento. Quest’impostazione ideologica si mantiene per tutto il periodo repubblicano e dell’Impero. Si lasciano liberi i territori conquistati con le proprie leggi e monete per i piccoli scambi; si inserisce solamente come moneta di scambio internazionale la moneta di Roma. Solo al momento della riforma monetale di Augusto, avvenuta dopo 20 anni di regno nel quale si è tentato di pacificare i territori occupati, si decide il rapporto fisso tra moneta di valore reale e di valore nominale. Nelle province si è continuato a battere moneta “provinciale”, con peso adeguato alla moneta di Roma ma con immagini che si rifanno alla cultura locale. A Roma le immagini del dritto sono standardizzate con il ritratto di Ottaviano Augusto o di alcuni componenti della sua famiglia; il rovescio invece diventa la voce dell’imperatore che informa delle sue imprese politiche e militari, dei suoi desideri di pace e prosperità che si rispecchiano anche nella monetazione provinciale che spesso per prima utilizza immagini e personificazioni con dettagli particolari che verranno poi assorbiti dalla monetazione dell’Urbe (vd. *Euthenia*).

70. CALLATAÿ, François de, Royal Library of Belgium

A collaborative database for Greek overstrikes

Greek coin overstrikes are of major interest to fix chronologies, to follow coin circulation and offer a extremely useful and unique tool to observe when coinages were officially demonetized and recycled. The aim is to build a database (ca. 900 coins in its actual stage - March 2014) authorized numismatists could nurture or/and improve.

71. CALLATAÿ, François de, Royal Library of Belgium

Fontes Inediti Numismatae Antiquae (FINA): A new international collaborative project to publish numismatic correspondences exchanged prior 1800 (Plenary session)

This keynote lecture aims to introduce and emphasise the benefits of a new international project devoted to all numismatic correspondences written before 1800. *Fontes Inediti Numismatae Antiquae (FINA)* has been launched in 2012 by a group a

scholars (more than 30 at present) under the aegis of the Österreichisches Akademie der Wissenschaften and the Royal Academy of Belgium. Directed by Michael Alram and François de Callatay, *FINA* has received the official support of the Académie des Inscriptions et Belles-Lettres, the Berlin-brandenburgische Akademie der Wissenschaften and the Unione Accademica Nazionale.

72. CALOMINO, Dario, The British Museum, London, United Kingdom

The Coinage of Diva Paulina in the Roman Provinces

The life of *Diva Paulina*, the deified wife of Maximinus Thrax (AD 235-238), is one of the most obscure chapters of the history of the Imperial family of the 3rd century AD. Since the archaeological, epigraphic and literary evidence is extremely poor, the numismatic evidence represents the primary source for information on her actual existence and appearance. Yet, the major studies on the empress have so far relied almost exclusively on the large posthumous coinage of the mint of Rome, whereas very few provincial coins have been exploited; they have actually revealed some of the most important information concerning *Paulina's* life (e.g. the possible date of her death). Drawing upon the systematic collection of materials for the progressing *Corpus of Roman Provincial Coinage 6* (from Elagabalus to Maximinus Thrax), this paper aims to recapitulate the still small but significant amount of information available, gathering together both already known and new data from the coin issues of the provincial cities, to present a novel and possibly more satisfying historical picture of *Diva Paulina*. This contribution will look especially at the portrait of the empress and at the chronology and puzzling frequency of coin issues in her name from southern Asia Minor rather than from the Balkans, where the Emperor Maximinus was born and spent most of his lifetime.

73. CAMPAGNOLO, Matteo, Musée d'art et d'histoire de Genève, Switzerland

Les poids byzantins à figures impériales des collections du Musée d'art et d'histoire de Genève

Cinquante ans après la parution du catalogue de Niklaus Dürr et Miroslav Lazovic, il fallait saisir l'occasion de mettre à jour la présentation des poids byzantins en alliage cuivreux conservés au Cabinet de numismatique de Genève, dont le nombre a considérablement augmenté depuis pour atteindre près de 500 pièces, dans le cadre de la publication des collections byzantines et à la veille d'une grande exposition sur «Byzance en Suisse». Les pièces connues reçoivent l'éclairage nouveau des pièces inédites et profitent des nombreuses études qui ont vu le jour entre-temps. La collection de Genève offre à son tour des points d'ancrage permettant de gagner une image plus claire de la production de poids et en particulier de retracer le développement des poids à l'effigie impériale à travers cinq siècles avec de nouveaux arguments. La communication présente les résultats obtenus et associe l'étude iconographique aux relevés techniques et aux analyses métalliques.

74. CAMPANELLI, Adele, Soprintendenza Archeologica di Salerno, Benevento, Avellino e Caserta, Italy – **FARIELLO, Maria**, Soprintendenza Archeologica di Salerno, Benevento, Avellino e Caserta, Italy - **DE ROSA, Saverio**, Italy

Tesoretto monetale da Lacedonia (AV), loc. Pauroso

Prendendo spunto dai ripostigli monetari editi e dalla panoramica emersa nel corso della ricerca dottorale, incentrata sulla circolazione monetaria nel territorio del basso Lazio e dell'alta Campania, il presente contributo si propone di approfondire alcuni aspetti della tesaurizzazione che si manifesta durante (ed all'indomani) delle guerre greco gotiche nell'Italia centro meridionale.

75. CAMPO, Marta, Spain

La moneda en las necrópolis del arco mediterráneo de Hispania (siglos I-II d.C.)

Se analiza el grado de incidencia de la moneda en las tumbas y su función en los rituales de la muerte en época altoimperial. El área de estudio abarca las necrópolis del litoral oriental de Hispania, desde las de la ciudad de Emporiae hasta las de Valentia, además de la del Puig des Molins en la isla de Ibiza. Desde inicios del siglo I d.C. hasta principios del III d.C., se constata un claro y progresivo incremento de la deposición de monedas en tumbas –entre un 6 y un 15% de las sepulturas–. Este grado de incidencia, siempre esporádico, concuerda con lo que también se ha documentado en otras zonas de Hispania y otras provincias del Imperio. La interpretación de los hallazgos monetarios en las necrópolis presenta una gran complejidad cuando

se pretende determinar los motivos que llevaron a los familiares de un difunto a depositar una moneda en su tumba. La deposición de estas monedas debe responder a una intención ritual, aunque en pocas ocasiones se puede determinar una causa precisa. Las monedas pudieron depositarse para servir de viático de acuerdo con la tradición del «óbolo de Caronte», de amuleto/talismán con un sentido supersticioso y apotropaico o para realizar ambas funciones a la vez, lo que no excluye otros motivos puntuales y esporádicos.

76. CANTILENA, Renata, Università di Salerno, Italy

Una moneta d'oro di Lampsaco a Poseidonia

Alla luce del ritrovamento di uno statere in oro di Lampsaco durante scavi effettuati a Poseidonia, si discute sulla presenza nel sito di moneta straniera pregiata.

77. CANTO GARCÍA, Alberto, Universidad Autónoma de Madrid, Spain - **MARTÍN ESCUDERO, Fátima**, Universidad Complutense de Madrid, Spain - **DOMENECH BELDA, Carolina**, Universidad de Alicante, Spain

Monedas fatimíes en el hallazgo de dinares de la calle Santa Elena (Valencia, España)

El hallazgo de la calle Santa Elena (Valencia, España) constituye el mayor conjunto de monedas de oro islámicas, de los siglos X y XI d.C., aparecido y conservado en España, desde mediados del siglo XIX. Compuesto por cerca de 2000 monedas y dividido en tres grandes grupos casi del mismo número de monedas: omeyas del s. X-XI d.C. y taifas peninsulares del siglo XI d.C.; emisiones norteafricanas de Siyilmasa y, por último, monedas de los califas fatimíes de los siglos X y XI d.C. La mayor parte de las emisiones pueden atribuirse a cecas sicilianas pero, asimismo, están presentes ejemplares de otras cecas fatimíes norteafricanas.

78. CARBONE, Federico, Università di Salerno, Italy

Semissi pestani a Pompei: dati sulla circolazione di età giulio-claudia

L'analisi delle monete coniate dalla zecca di Paestum nell'ultimo periodo di attività in età giulio-claudia, se letta tenendo conto degli altri esemplari già noti e provenienti dall'area vesuviana, consente di determinare dati relativi alla funzione e alla circolazione di questa produzione. Anche se limitati nel numero, i nuovi esemplari rinvenuti nei più recenti scavi appaiono significativi per definire meglio gli aspetti legati alla circolazione extra-urbana. Le ricerche condotte nell'area di Pompei, ad esempio, risultano di notevole importanza. Degno di nota è un importante tesoretto composto da 39 esemplari tutti attribuibili alle serie che, attraverso la leggenda, rimandano a Mineia - facoltosa evergete locale e moglie di un esponente del partito cesariano - alla quale si deve il rifacimento di diverse strutture, tra cui la basilica rappresentata al rovescio di questa serie di semissi. Tra le monete del gruzzolo, 33 esemplari appartengono alla stessa serie e, tra questi, un gruppo omogeneo di almeno 25 monete proviene dall'arca collocata a Sud-Est dell'atrio della Casa della Venere in bikini. Lo stile incisivo è notevolmente scarso e gli esemplari sono stati prodotti grazie all'utilizzo di un limitato numero di conî; il grado di usura indica che questi non devono aver circolato a lungo; gli assi di conio sono riferibili a 90 o 245 gradi.

79. CARBONE, Lucia Francesca, Columbia University, United States of America

Globalization and local monetary systems: the denarius and its epigraphic attestations in the province of Asia (2nd century BC – 2nd century AD)

Strong local economies faced real tension because of the standardized needs of the Roman economic expansion in the Mediterranean. Among other elements, the use of the *denarius* should be considered instrumental to the economic integration of Rome and its provinces already by the first century BC, as hoard evidence and fixed currency exchange rates demonstrate. The province of Asia, however, seems to be quite a different case, as local silver currencies (*cistophorus* and silver autonomous coinages) maintained numerical predominance both in production and circulation until the Augustan Age. This paper focuses on the analysis of the Asian inscriptions mentioning *denarii* between 2nd century BC and 2nd century AD, relying on a unique database of 273 inscriptions. There are only few epigraphic attestations of the use of Roman currency for private transactions (testaments, burials) until the 2nd century AD. The mention of Roman currency is initially limited to strongly Romanized contexts and government-related documents. The most frequent and earliest attestations of *denarii* are— not surprisingly—in documents related to taxes. The exaction of taxes in *denarii*, accompanied by their scant presence in

everyday practices, suggest an important role played by a limited *élite*, mostly to be identified with the *societates publicanorum*, who took economic advantage of the endurance of different currencies and from the related need for their exchange.

80. CARDON, Thibault, Ehess, Crh-Gam, Paris, France

Les monnaies et méreaux en contexte archéologique comme source pour l'étude du salariat (XIe-XVe siècle)

Les pertes de monnaies sur un site archéologique ne sont pas mécaniquement proportionnelles à l'intensité d'une occupation. Suite à une observation de Jens-Christian Moesgaard au sujet d'une abbaye normande, nous avons tenté de caractériser les pics de pertes contemporains des grandes phases de construction de sites médiévaux pour la moitié nord de la France. Une étude fine de plusieurs cas permet d'affirmer que ces pertes sont bien liées au fonctionnement des chantiers, et peuvent même pour partie être rattachées au paiement des salaires. Il devient dès lors possible d'aborder un aspect très peu documenté de l'histoire du salariat – et spécialement du salariat des manœuvres – à savoir le passage de monnaies de compte aux instruments monétaires réellement employés. Loin d'être évident, le passage de l'un à l'autre est en fait l'occasion pour les centres payeurs de mettre en place différents dispositifs pour baisser le prix des salaires et contrôler les dépenses des manœuvres: paiement en monnaies noires, import de monnaies dévaluées, méreaux de salaires. Si certains de ces dispositifs, sources de tensions sociales, ont été décrits par Guy Thuillier pour le XIXe siècle, les monnaies en contexte archéologique fournissent une occasion unique d'en faire l'histoire sur la longue durée. Loin d'être insignifiantes, ces pratiques nous semblent symptomatiques d'usages des monnaies comme marqueurs et reproducteurs de positions socio-économiques. Ce travail participe d'une étude plus large, menée dans le cadre d'une thèse d'histoire (Ehess, Paris), sur les usages des monnaies médiévales à partir de sources archéologiques.

81. CARROCCIO, Benedetto, Università della Calabria, Italy

Tesoretti, corrosione, coniazioni parallele, cronologia: i "tridenti" di Ierone II

Molti non accettano datazioni alla II Guerra Punica dei AE siracusani Poseidon/Tridente di modulo ridotto di Ierone II (269-215 a.C.) perché non accettano lunghe interruzioni delle coniazioni nel suo regno e perché la loro particolare abbondanza e (a volte) usura indicherebbero una prolungata coniazione e circolazione. Lo studio, anche dei coni, con foto HD, di 18 tesoretti dei musei di Siracusa e Palermo, tra cui "Megara Hyblaea 1967" e "Sicilia" (IGCH 2225), con più di mille pezzi, per un totale di 2581 "tridenti" associati a 566 pezzi di altre serie e zecche, permette migliori distinzioni delle serie e di far risalire molte usure non a circolazione ma a uso di acidi e prosecuzione di corrosione. I numerosi coni (quasi 300 diritti e 400 rovesci) sono segnati da solo 9 marchi di zecca, che tornano soltanto in alcune serie AE di Ieronimo (215-214 a.C.) e V Democrazia. Spezzoni della loro sequenza, ripetenti il passaggio dalla IEP alla IEPΩ alla sinistra del tridente, e comunanze di coni di rovescio permettono di ricostruire la cronologia interna e l'adozione contemporanea di almeno 7 linee produttive e 3 diverse sigle, più altre coniazioni parallele con stessa sigla, indici di coniazione massiccia ma breve, compressa verso il certo parallelo cronologico delle serie di Ieronimo. Ne derivano riflessioni sul corretto uso di alcune metodologie numismatiche.

82. CARVALHEIRO PORTO, Vagner, Museum of Archaeology and Ethnology, University of São Paulo, Brazil

Western and Eastern Provincial Roman coins: a view from the margins

The aim of this paper is to analyze possible iconographical patterns between Roman Provincial Coinage from the cities of Iberia, that is, on the western tip of the Empire, and of Siria-Palestina, on the eastern tip. One iconographical subject that can be thus studied is the imagery related to the imperial cult, which will be treated through the perspective of the Post-Colonial Theories, as well as Rome's relationship with the local elites.

83. CASOLI, Andrea, Institut für Numismatik und Geldgeschichte, University of Vienna, Austria

Roma o Lugdunum? L'inizio della monetazione romana imperiale di Nerone

Nel presente contributo viene illustrata parte dei risultati emersi nell'ambito di una ricerca svolta nel corso del mio dottorato presso l'Università di Vienna. La dissertazione è centrata sullo studio della monetazione imperiale romana di Nerone (54-68 d. C.), la quale rappresenta sotto molti aspetti uno spartiacque dal punto di vista numismatico. Sotto questo imperatore le monete in metallo prezioso subiranno profondi cambiamenti di peso e, per l'argento, di titolo, creando uno nuovo standard (che verrà,

230 anni dopo, ripreso persino da Diocleziano per la sua riforma). Anche le monete in Æ , reintrodotte dopo una lunga pausa di circa due decenni tra il 62 e il 64 d. C. stupiscono per il loro carattere quasi sperimentale (si considerino, ad esempio: intere serie in oricalco, con o senza segni del valore, con o senza il tipico “SC”). Nella relazione si porrà l’accento sull’attribuzione geografica dei primi *aurei* e *denarii* di Nerone. Oggi si ritiene ragionevole supporre che la monetazione emessa prima della nota “riforma monetaria” (cioè tra il 54 ed il 64 d. C.) provenga integralmente dalla zecca imperiale di Lugdunum, e che solo in seguito la produzione in metallo prezioso sia stata spostata definitivamente a Roma (cfr. Giard 1988, Wolters 1999, Butcher e Ponting 2005; *contra* Mac Dowall 1979, Sutherland 1984). In questo contributo, per contro, verrà proposta una lettura più differenziata e, applicando il metodo del cosiddetto *Wiener Aufbau*, si ipotizza che la coniazione di questi primissimi, particolari tipi monetali sia avvenuta presso la zecca di Roma.

84. CASSANO, Maria Raffaella, Università di Bari "Aldo Moro", Italy - **TRAVAGLINI, Adriana**, Università del Salento, Italy - **FIORIELLO, Custode Silvio**, Università di Bari "Aldo Moro", Italy - **BRANDI, Serena**, Università di Bari "Aldo Moro", Italy - **CAMILLERI, Valeria Giulia**, Università del Salento, Italy - **DE PINTO, Nicola**, Università di Bari "Aldo Moro", Italy - **SILVESTRI, Maria**, Università di Bari "Aldo Moro", Italy

La collezione numismatica del Museo Archeologico Provinciale di Bari (poster)

Un accordo di collaborazione tecnico-scientifica tra la Provincia di Bari (servizio Biblioteca e Museo Archeologico) e l’Università degli Studi di Bari “Aldo Moro” ha consentito di portare a compimento il riordino, l’inventariazione e la catalogazione su supporto elettronico della collezione numismatica del Museo Archeologico Provinciale di Bari e di avviare successive fasi di studio e di edizione del materiale. Consistente ed eterogenea, la collezione museale presenta oltre 12.000 reperti (tra cui oggetti paramonetali e riproduzioni moderne) che si distribuiscono tra la metà del VI sec. a.C. e l’età moderna; essa ingloba nuclei donati o acquistati fin dall’800 e affianca alle monete di incerta provenienza singoli esemplari e tesori rinvenuti in area pugliese. La collezione riveste grande interesse, sia sotto il profilo dei criteri selettivi di formazione di alcuni gruppi di monete, sia per i significativi echi del circolante locale in essa riflessi.

85. CASTRIZIO, Daniele, Università di Messina, Italy

Le emissioni "bizantine" della zecca di Alessandria: una revisione cronologica

La cronologia delle emissioni "bizantine" della zecca di Alessandria non può ancora considerarsi definitiva. Troppe incognite gravano sulla sequenza delle emissioni e sulla loro cronologia relativa e assoluta, con molte serie monetali che non hanno ancora una sicura paternità e la cui interpretazione registra proposte che oscillano non di pochi anni, ma di decenni. Lo studio dei materiali numismatici ritrovati ad Antinópolis e nei vari siti egiziani sottoposti a indagini archeologiche permette, a nostro avviso, una nuova proposta di cronologia, basata su dati oggettivi e stratigrafici, con l’obiettivo di attribuire ai vari imperatori le serie conosciute.

86. CAVALLARO, Emilia, Università di Messina, Italy

Sulle vie di una nuova scienza: la trattatistica numismatica tra Cinque e Seicento

Tra Cinque e Seicento si svilupparono in Europa e soprattutto in Italia due filoni della trattatistica numismatica: quello iconografico, più interessato all’aspetto artistico e figurativo, e quello metrologico, rivolto alla ricostruzione dei rapporti di valore tra sistemi monetali. Il primo, inaugurato da Andrea Fulvio, ebbe largo seguito, rivelandosi maggiormente accessibile anche al pubblico appassionato ma non necessariamente erudito a causa dell’accattivante presenza delle immagini; il secondo conobbe in Guillaume Budé il suo pioniere e suscitò un interesse più di nicchia tra gli intellettuali e collezionisti del tempo. L’intervento ripercorre le linee principali dello sviluppo dei due filoni allo scopo di comprendere storicamente la nascita di tali interessi alla luce dei più importanti eventi dell’epoca. Toccate in modo diverso dalla rinascita della filologia, queste due categorie di studi influenzarono in maniera complementare il moderno metodo di ricerca numismatica e storica, che proprio in questo periodo si rinnovava ed evolveva in maniera significativa verso la scientificità. La rinascita dell’interesse antiquario prima e di quello economico poi portarono gli studiosi dell’antico ad elaborare metodi sempre più innovativi, anche per riscattare gli interessi umanistici dalla recente condanna cartesiana.

87. CHAVES TRISTÁN, Francisca, Universidad de Sevilla, Spain - **PLIEGO VÁZQUEZ, Ruth**, Universidad de Sevilla, Spain

Nuevos testimonios monetales de emisiones hispano-cartaginesas en la Península Ibérica

Hace años tuvimos la oportunidad de recoger una serie de hallazgos procedentes de diversos lugares de la actual Andalucía que consistían en monedas cartaginesas en las que predominaban las emitidas por los cartagineses en suelo de la península Ibérica, realizadas en su mayoría en función, primero de los preparativos y después del desarrollo, de la II guerra Púnica en suelo de Iberia. Recogimos la procedencia del material en un mapa que luego hemos ampliado, y ha servido como punto de referencia en numerosos estudios enmarcados en dicho periodo. Más recientemente se nos ha presentado la ocasión de analizar de forma directa un no pequeño número de hallazgos semejantes, compuestos de monedas de bronce y en otros casos también de plata, que abren un interesante abanico de combinaciones en el estudio del material monetario emitido en Iberia por ambos bandos beligerantes, su uso, dispersión etc., siempre con el telón de fondo de los movimientos de los ejércitos en lucha - cartagineses, romanos y también pueblos locales- y de la posesión y pérdida de los diversos territorios por parte de ambos grupos beligerantes. Para este primer trabajo hemos seleccionado -debido a que tanto el número de lugares estudiados como el de monedas procedentes de ellos es abundante- dos de los sitios donde se ha concentrado numerario de estas características y donde también se ve involucrada la población local: Mengíbar, la antigua Iliturgi, y el yacimiento de Giribaile (prov. Jaén), ya que en ambos casos se trata de oppida indígenas. Nos ha parecido además conveniente realizar un mapa con las localizaciones que contienen grupos numerosos de ejemplares que se adscriben a estos condicionantes, cuyo numerario tenemos en estudio en este momento.

88. CHEVILLON, Jean-Albert, France

Le monnayage archaïque de la Théliné grecque (Arles)

Connues en particulier au travers du «trésor de Volterra» en Etrurie, dont elles composaient la totalité des espèces présentes, ces monnaies archaïques au style particulier ont toujours suscitées un bon nombre d'interrogations. Attribuées à l'ambiance «gréco-étrusque» de Populonia, ces séries furent repositionnées en Gaule du sud-est lorsqu'il fut confirmé que les nombreuses trouvailles isolées se situaient presque exclusivement en Provence. Depuis, d'autres groupes «gréco-provençaux» aux caractéristiques communes sont venus se rajouter à cet ensemble à types multiples dont les frappes débutent au cours du dernier quart du VI^e s. et se prolongent jusque vers la fin de la période archaïque. Très fortement influencées par le monde phocéén et bien différenciées dans leur style et leur choix iconographique ainsi que par leur zone de circulation par rapport au monnayage de Massalia, nous proposons, en nous appuyant sur les données historiques et archéologiques, d'attribuer ces séries à l'unique autre cité phocéenne «constituée» à cette haute époque en Provence: la Théliné archaïque (Arles).

89. CHIANTINI, Chiara, Italy - **MOLINARI, Maria Cristina**, Sovrintendenza Roma Capitale Musei Capitolini, Italy

Un ripostiglio di IV secolo d.C. proveniente dagli scavi del sottosuolo capitolino (poster)

Il lavoro si è concentrato su un ripostiglio inedito conservato al Medagliere dei Musei Capitolini e proveniente dagli scavi del cosiddetto "sottosuolo urbano II", di cui purtroppo non siamo a conoscenza del luogo esatto di ritrovamento. Il ripostiglio è composto da circa trecentocinquanta monete di bronzo databili al IV secolo d.C.: ad eccezione di un esemplare coniato da Massenzio a Roma, i pezzi più antichi sono collocabili sotto il regno di Costantino e Licinio, mentre i più recenti si datano tra la fine del regno di Teodosio e i primi anni di quello dei figli Arcadio e Onorio. La serie più abbondante è il tipo della FEL TEMP REPARATIO emessa durante il regno di Costanzo II; segue, per quantità, il tipo della SECVRITAS REIPVBLICAE collocabile negli anni di Valentiniano I e Valente. Il resto del ripostiglio è composto da varie serie, tra cui spiccano per numero di esemplari i tipi del GLORIA EXERCITVS e del GLORIA ROMANORVM.

90. CHIAPPINI, Alessia, Università di Roma "Tor Vergata", Italy

Virtù e personificazioni nel Libro delle medaglie da Cesare a Commodo di Pirro Ligorio

Il codice 21 delle Antichità Romane di Pirro Ligorio, conservato all'Archivio di Stato di Torino, è, come noto, dedicato alla storia di Roma da Cesare a Commodo, così come testimoniata dalle monete, con il supporto delle fonti storiche ed epigrafiche. I disegni delle monete, che accompagnano il testo, rappresentano in molti casi i ritratti, quasi sempre fedeli, degli imperatori,

delle Auguste, dei Cesari e dei *Divi* e in altri, più numerosi, i tipi dei rovesci: soprattutto monumenti, divinità, personificazioni. Tra queste ultime sono più frequenti l'*Abundantia*, l'*Aeternitas*, l'*Aequitas* e la *Iustitia*, nelle consuete rappresentazioni monetali di età imperiale. Altre, quali la *Temperantia*, sono solo citate nel testo ligoriano e, sebbene non disegnate nel manoscritto, trovano una propria rappresentazione nella Sala delle Virtù di Villa d'Este a Tivoli, affrescata dall'Agresti su progetto del Ligorio. Personificazioni, poi, come la *Laetitia* e la *Immortalitas*, dovevano completare la decorazione del soffitto della Sala dell'Aurora del Castello Estense; mai realizzate, sono conosciute da un disegno ligoriano che ne mostra un modello preliminare. L'analisi di queste rappresentazioni sembra allora determinante per l'individuazione delle fonti d'ispirazione del Ligorio; in particolare, per comprendere se egli abbia usato maggiormente motivi dell'iconografia tradizionale o piuttosto quelli derivati dalla tipologia monetale, nel tentativo di delineare un quadro più completo possibile della documentazione numismatica di cui poteva disporre.

91. CHILLÈ, Maria, Università di Messina, Italy

La moneta dei mercenari nell'Anabasi di Senofonte

Fonte preziosa per lo studio del fenomeno del mercenariato è l'Anabasi di Senofonte, dalla quale emergono le dinamiche economico-finanziarie relative all'attività dei *misthophoroi* in area egea e persiana all'inizio del IV secolo a.C. La moneta è presente come mezzo di pagamento delle spettanze ai mercenari, oggetto di scambio e di contrattazioni per il reclutamento e, infine, come parte del bottino. Varie sono, in rapporto alle aree geografiche, le valute menzionate e/o impiegate dai Diecimila e dai loro interlocutori: oltre al preponderante darico, fanno la loro comparsa il talento, la mina, il ciziceno, il siglo, l'obolo. Il presente contributo intende prendere in esame i luoghi dell'opera relativi alla presenza e ai movimenti di denaro a partire dall'analisi del lessico adoperato dall'autore nei differenti contesti. Si procederà a individuare le località presso le quali ciascuna tipologia di moneta è menzionata o scambiata, al fine di tracciare una mappa della diffusione e circolazione della valuta quale emerge dall'Anabasi e di offrire uno spaccato della storia economica delle aree toccate dalla spedizione dei mercenari di Ciro il Giovane.

92. CHIMIENTI, Michele, Accademia Italiana di Numismatica, Italy

Archive of the mint of Bologna

An extensive archival documentation of the mint of Bologna (1191-1862) is present in the State Archives of Bologna. These documents are divided into two groups: those issued directly by the government, then recorded between his actions and those specific to the mint, stored in a different location. All governmental acts were recorded together although in different headings while those of the mint remained in the mint itself ready to be consulted. For a long time the activity of the mint was farmed out for short periods to private people chosen by the government. Finished the contract, the premises of the mint were released and the subsequent contract was done elsewhere. This is why in earlier period the archive was dispersed and only governmental acts remain. At ASB early documents of the Middle Ages are collected in a special fund, "Ufficio della Zecca". One part is the extraction of the mint (since 1380); another a collection of manuscripts notices of monetary interest (since 1436); a third a series of contracts from the mint (since 1464). Only in the seventeenth century a vast archive dedicated to the activity of the mint appears, the Assunteria of the Mint. After the conquest of Napoleon a new archive was created, much more extensive and organized, called "Direzione di Zecca", well organized, divided into sections according to the provisions of the bureaucracy introduced by the French. The Restoration did not alter the structure.

93. CHOWANIEC, Roksana, University of Warsaw, Poland – WIECEK, Tomasz, University of Warsaw, Poland

The history of ancient town Akrai/Acrae, south-eastern Sicily, in the light of new numismatic finds

Archaeologists discuss about towns of Greek origin in the south-eastern Sicily, which flourished in vicinity of Syracuse but finally fell into Roman possession. Town of Akrai is excellent example. As a Greek colony, established 664/663 BC by Syracuse, for long time developed in shadow of its metropolis. Its history is known from few ancient written source, which gave us some snapshots and become almost silent after 212 BC. For this reason, this part of Akrai is practically unknown. Visible changes could take place there during III c. BC, when Akrai stood firmly with Hiero II. After broken alliance with Rome and the fall of Syracuse (214–212 BC), Acrae was forced to obedience by new masters and paid tribute. It could indicate that town existed in new political structures. But what did Akrai actually experience? Ignorance of town's history activated new archaeological investigations and 're-thinking' of Acrae. Research was inaugurated in 2009, thanks to agreement between University of Warsaw and Soprintendenza BB.CC.AA in Syracuse. Thanks to archaeological finds, also

coins, huge gaps in history now are filled. Coins so far has proven town existence during late Classical, throughout Hellenistic, Roman (Republican and Imperial) and Byzantine periods. Almost 600 coins were found while four excavations (2011-2014), except few made of silver, bulk is made of bronze alloys, reflecting everyday needs of inhabitants. Judging by coins only, some topics worth mentioning include, i.e. military presence in Akrai during Second Punic War; final issues of Syracusan mint of “decline/roman rule period”; cases of overstriking; “mystery” of issue of Acrae; imitations of late III c. AD *antoniniani*.

94. CIOLEK, Renata, University of Warsaw, Poland

Römische Münzen in dem Legionslager an der Donau. Casus von Novae (Bulgarien)

Der Auftrag zeigt den Münzumschlag im Legionslager an unteren Donau, zusammen mit der Analyse der Datierungsmöglichkeiten der Objekte bei Hilfe der Münzen. Es wurde versucht, die Geldzirkulation in Lagern entlang der Donau zu rekonstruieren, aufgrund des Materials, das der Verfasserin zur Verfügung stand. Es geht um Münzen aus Ausgrabungen in Novae (Bulgarien), Militärlager in der Provinz Moesia Inferior, insbesondere aus dem Gebiet des Militärkrankenhauses. Die Analysen basieren auf Publikationen, Archive und eigene Forschung der Verfasserin. Um die Möglichkeiten der Objektdatierung basierend auf Münzen zu präsentieren, werden mehrere Objekte aus Ausgrabungen vorgestellt. Die hier gefundenen Münzen spiegeln die Lagersgeschichte. Große Anzahl der Münzen von der julisch-claudischen Dynastie zeigt den Lagersbeginn. Erste Hälfte des 3. Jhs dominierten Provinzmünzen, für den Münzumschlag in Novae charakteristisch. Die Münzfunde aus der ersten Hälfte des 3. Jahrhunderts zeigen, dass der Bedarf an Geld nur von moesischen und thrakischen Münzstätten erfüllt wurde. Die Denare sind in geringer Zahl. Es fehlt Goldmünzen. Diese Struktur ist typisch für den Münzumschlag in Moesia und Thrakien bis zur Mitte des 3. Jahrhunderts. Die Münzen aus dem 4. Jh. treten in relativ großen Mengen auf. Diese kommen aus balkanischen Münzstätten vor. Die Münzfunde aus dem Legionslager in Novae zeigen, dass balkanische und kleinasiatische Prägungen am Ende des 3. und im 4. Jhs in Moesia die überwiegende Mehrheit hatte. Aus westlichen erreichten die Münzen in sehr geringen Mengen. In der gegenwärtigen Forschungsphase kann man ausgehen, dass die Beobachtungen über den römischen Münzumschlag in Novae auch für andere Legionslager an der unteren Donau gelten.

95. ÇIZMELİ ÖĞÜN, Zeynep, Ankara Üniversitesi, Turkey

Hadrianopolis (Edirne) Macedonian Tower Excavation Coins Finds (2002-2003)

In 2002-2003 the Hadrianopolis excavation team, under the direction of Şahin Yıldırım, working on behalf of the Edirne Museum Directorate, found 1775 coins during the Macedonian Tower excavations. Although these coins were unearthed in archaeological context, some had very poor conservation status. Of the 1775 coins, only 288 could be restored and catalogued.

96. CLAES, Liesbeth, Leiden University, The Netherlands

Eastern usurpers or loyal vassals? Coins about the regional and imperial ambitions of the third-century eastern pretenders

The third century saw several changes: coin standards debased, barbarians raided the border regions, and epidemics depleted the population. The size of the Empire made it impossible for Roman emperors to be where their presence was required, for example, along the borders where there were simultaneous attacks at various fronts. Already early in the third century this issue had triggered the creation of the office of *rector Orientis*, who was assigned to administer all eastern provinces in the emperor's name. However, this office does not seem to have been sufficed: the East saw many crises resulting in the proclamation of several usurpers. The proposed paper explores the imperial intentions of these eastern pretenders, such as Uranius, Vaballathus and Saturninus. Due to scanty references in literary sources, modern historians, such as Watson and Potter, perceive these pretenders as direct rivals to the imperial throne. On their coinage, the lack of imperial titles and the focus on local hallmarks hint at more regional claims, as also Estiot has argued. This paper takes a further step by demonstrating that their imperial ambitions have grown rather gradually, inspired by the new office of *rector Orientis* and other imperial delegates. While pending for imperial approval, the pretenders' coins reveal that they became more ambitious in a later stage, displaying more 'imperial' messages, which in most cases meant the end of their leadership. This paper shows how coinage remains an invaluable source to reconstruct the institutional crisis of the third century in addition to other sources.

97. CLUA MERCADAL, Maria, Gabinet numismatic de Catalunya- MNAC, Spain

Alternativas monetarias adoptadas en Catalunya durante la baja edad media

Durante la Baja Edad Media se dieron en el territorio catalán alternativas monetarias que acompañaron a la moneda acuñada en las cecas reales de Barcelona y Perpiñán. A las monedas de oro -los florines-, de plata -los croats- y de vellón -los dineros-, se sumaron otros objetos monetales o paramonetales que circularon conjuntamente. Se trataba, principalmente, de la llamada moneda local, acuñada a iniciativa de algunos municipios por la falta de moneda divisionaria. También se usaron piezas monetiformes de plomo, que si bien no son muy abundantes en el territorio y su conocimiento es escaso, empiezan a encontrarse ejemplares en los hallazgos monetarios. Otro material que también suele aparecer son los jetones, piezas que suelen proceder del reino vecino de Francia o de centroeuropa, que se mezclan con la moneda oficial. Si bien el estudio se centrará principalmente en Catalunya, no podemos olvidar que la Corona de Aragón estaba configurada junto con los reinos de Aragón, Valencia, Mallorca y los territorios marítimos, cuyas monedas circulaban en el territorio siendo en ocasiones una alternativa más a la circulación monetaria oficial. Así de este modo, y desde la perspectiva de los hallazgos arqueológicos en estratigrafía, se analizarán las piezas monetarias que acompañan a la moneda oficial, incidiendo en el momento cronológico en que estas piezas aparecen y en su función concreta en el circuito.

98. CODINE, Florence, Bibliothèque Nationale de France, France

Coin cataloguing in an existing format: adapting INTERMARC for the Bibliothèque nationale de France's collections

Coin collections are held in a variety of institution types worldwide, mainly museums, libraries or archives. These institutions usually have an existing catalogue system into which the coin collection, if it is to be catalogued online, must somehow be integrated. Those online catalogues make use of internationally recognized standards such as EAD or MARC, which were not thought out with coins in mind. It is therefore a challenge to adapt those formats for quality coin description. Additional issues include cataloguing extremely diverse collections (oriental, antique, contemporary) using a single standard that can be adapted to each. It is also crucial to ensure that the data created can be exchanged and used in future research projects or portals involving other collections that may not be using the same format. This paper aims to present the Bibliothèque nationale de France's work in adapting the INTERMARC format to the description of its coin collections, ranging from ancient Greece to contemporary issues, in a way that allows for exchange and reuse of this information by researchers and in linked open data projects.

99. CONEJO DELGADO, Noé, Universidad de Sevilla, Spain

Villae Romanas y Vía de la Plata: Aproximación a la economía rural romana de la parte occidental de la Península Ibérica a través del registro monetario

Mediante el análisis del registro monetario documentado en las excavaciones arqueológicas efectuadas en diferentes villae romanas cercanas a la Vía de la Plata, pretendemos aproximarnos a la economía rural romana de la parte occidental de Hispania, un tema que se encuentra un tanto abandonado en los últimos años. La Vía de la Plata fue un excelente eje vertebrador de toda la parte occidental de la Península Ibérica, desde los tiempos anteriores al dominio romano. De la misma manera que en época romano republicana y en los primeros años del Imperio esta vía fue un elemento de transmisión de elementos socioeconómicos, creemos que en los siglos posteriores, siguió teniendo un papel fundamental en cuanto al desarrollo económico de las áreas rurales por las que transitaba, ya que a través de ella, se distribuían todo tipo de mercancías, al igual que ideas. Por otra parte, la villae es entendida como el elemento principal para entender la economía rural romana en Hispania. La combinación de ambos elementos permite identificar los siguientes: las villae documentadas en las inmediaciones de la Vía de la Plata presentan unas características definitorias de economías abiertas dedicadas al intercambio, muy diferentes a las villae documentadas en zonas más alejadas y del interior, donde el registro numismático es casi inexistente.

100. CONSTANTINESCU, Bogdan, National Institute for Nuclear Physics and Engineering, Bucharest, Romania - **OBERLAENDER-TARNOVEANU, Ernest**, National History Museum of Romania, Bucharest, Romania - **CRISTEA-STAN, Daniela**, National Institute for Nuclear Physics and Engineering, Bucharest, Romania

Information on silver and gold Dacian "Koson" coins based on alloys composition analyzed by X-Ray Fluorescence and their possible emissions chronology

In the last years, hoards consisting of massive gold, multiply coiled bracelets, pseudo-Lysimachus type staters, gold and silver Dacian “Koson” coins were found during illegal detection activities around Sarmizegetusa Regia, nearby the sacred precincts. The “Kosons” have Roman iconography and Greek inscription. In 2009, Romanian Police recuperated a hoard of 143 Koson coins (37 with monogram and 106 without monogram) and in May 2011 from USA 163 silver “Kosons” and 27 pseudo-Lysimachus staters. From our X Rays-based compositional study we concluded the coins without monogram are made of native Transylvanian gold - a similar composition with the gold bracelets. The monogram samples are similar to the alloy used in the Balkan workshops for the pseudo-Lysimachus - type staters. One of us (B. C.) proposes the following in-time evolution for “kosons” emissions: - Silver “Kosons” type Macedonia Prima (drachms) inscripted KOSON DROUEIS - two different alloys - Silver “Kosons” inscripted KOSON with monogram BRU – the second alloy from Macedonia Prima emission - Pseudo-Lysimachus-staters type Callatis and Tomis – refined gold used for regional coinage - Gold “Kosons” with monogram BRU – refined gold for jewelry The minting was performed in a workshop somewhere in Macedonia, ordered by Brutus as payment for his allies Koson and Droueis. - Gold “Kosons” without monogram – alluvial Transylvanian gold, “Barbarian” copies of Brutus’s coins minted in Sarmizegetusa region. After the defeat of Brutus, Koson offered his silver-gold payment and the without monogram emission to Dacian God – votive deposits around main sanctuary in Sarmizegetusa.

101. CONSTANTINESCU, Bogdan, Horia Hulubei National Institute for Nuclear Physics and Engineering Măgurele, Romania - **TALMAȚCHI, Gabriel Mircea**, Museum of National History and Archaeology Constanța, Romania - **CRISTEA STAN, Daniela**, Horia Hulubei National Institute for Nuclear Physics and Engineering Măgurele, Romania

New information on monetary arrowheads found in Dobroudja based on X-rays analysis of their alloy composition

An interdisciplinary program to study the alloy composition of monetary and warfare Scythian design arrowheads (trilobates or dilobates, sometimes with thorn) found together in same deposits in Dobroudja was started using XRF (X-Ray Fluorescence) and PIXE methods. Until now, we investigated discoveries in Istros, Golovita and Cogevalac (settlements for Istros chora) and Floriile (autochthonous fortified settlement). Besides the “classical” Copper-Tin-Lead bronze type, with various proportion of tin (to increase hardness) or lead (to facilitate the casting process), two “unusual” types of bronze - used both for warfare (including pieces with cut pointed-end impossible to use as weapon) and for monetary arrowheads - were identified: Cu-Sn(Pb)-Mn for Golovita, Cogevalac and Floriile items and Cu-Sn(Pb)-Sb for many Istros items. We also identified some monetary arrowheads with a mixed alloy containing both Mn and Sb, more probably from re-melting of warfare arrowheads. A preliminary geological provenance of Cu-Mn and Cu-Sb (polymetallic ores?) minerals could indicate Ukraine (very rich in manganese ores) or Caucasus for Cu-Mn and north-west of Hungary from Cu-Sb, regions related to Scythians in VII-V Centuries BC. We propose the following time-evolution scenario: - Warfare of the Scythian type arrowheads used to intermediate exchanges between Greek milesian colonies and “barbarian” neighbors (mainly Scythians); - Mechanically modified (without killing capability) arrowheads “safely” used as pre-coins; - Dedicated cast monetary signs (generally leaf-shaped) issued by Greeks from re-melting of the real arrowheads. Interpretation of these results in relation with commercial and political aspects between Greeks and local populations (Scythian, Thracian) is presented.

102. CONVENTI, Alberto, Università IUAV di Venezia, Italy – **LAZZARINI, Lorenzo**, Università IUAV di Venezia, Italy

Analisi chimiche di monete di elettro e oro di Siracusa greca (poster)

Sono state analizzate mediante microscopia elettronica a scansione (SEM) interfacciata con microsonda a dispersione di energia (EDS) dieci monete di oro e tre di elettro emesse da Siracusa dalla seconda metà del V alla fine del II secolo a.C. Esse comprendono un pezzo da 20 lire della fine della seconda democrazia, un tristatere di Timoleonte, due decadrampi e un doppio decadramma più un pezzo da 5 dracme, uno da 12 e uno da 50 lire di Agatocle, un decadramma di Iceta, uno di Ierone II e un 25 lire di Ieronimo. I risultati ottenuti indicano che l'oro usato era generalmente molto puro, contenendo solo in alcuni nominali tracce di rame e piccole quantità di argento, quest'ultimo ovviamente in percentuali maggiori, che sono state di volta in volta determinate, nell'elettro, dando così indicazioni utili a una migliore conoscenza delle emissioni analizzate anche ai fini di eventuali determinazioni di autenticità di analoghi esemplari. Per quest'ultimo scopo, la presenza di piccolissimi (3-10 micron) inclusi di quarzo (residui della ganga del minerale di partenza?) nell'oro agatocleo e ieroniano è risultata particolarmente significativa.

103. COOK, Barrie, The British Museum, United Kingdom

The “King's Bezant”: offering pieces in early modern England

The “King's Bezant” was a term that becomes visible in English sources from the late 15th to the 17th centuries. It was used to describe offerings in gold made by English monarchs at religious services, particularly under the Tudors and early Stuarts. Its origin would appear to lie in the tradition of using Byzantine gold coins in such a role observable in the 12th and 13th centuries. By the 16th century it seems that either ordinary gold coins were used, or else a specially-made gold coin was created for ceremonial use that would be later recovered for reuse in exchange for standard currency coins after the ceremony. This paper will review the evidence for the role of the 'king's bezant' and the actual objects that were, or may have been, used in practice.

104. CORFÙ, Nicolas Assur, University of Basel, Switzerland

The Tetartemorion- the smallest pre-hellenistic silver coin

Since the late 1980's series of silver coins, with the value of a quarter of an obol, have emerged in both the numismatic literature and on the coin market. These so-called “*Tetartemoria*” are about 5 millimetres in diameter and circa 0.2 g. in weight. Most examples of the denomination originate from Asia Minor. In this paper the Greek sources for the term, “*Tetartemorion*,” which in its primary sense means “a quarter part of”, will be discussed. The term is first used in Herodotus (II. 180) in its literal sense. The first reference to its value as a quarter of an obol is from Deinarchos in the later fourth century BCE, as recorded by Harpocration. The term, “*Tetartemorion*,” does not appear to have been in common use for coins and the value seems not indicated on coins with TE monogram, e.g. on *Tetartemoria* of Kolophon. A special series of *Tetartemoria* will be presented here for the first time. These share the same obverse, an archer with bow and dagger, as known from the siglos emission type IV of Sardeis. There are as many as 8 reverse types: the head of – a king, – of Athena, – of Hermes, – of Apollo, – of a satrap, – of a young man, a horse protome and an owl. These reverses contain some genuine late Classical masterpieces. It is said that they originate in Cilicia, but a Carian origin is possible as well.

105. CORSI, Jacopo, Università di Torino, Italy

The lions of Artemis. A die link study of the heavy drachms of Massalia (poster)

The Massalian monetary system has been essentially based, for several centuries, on small silver denominations, whose the most famous is the “*à la roue*” obol. The introduction of the heavy drachm represents a crucial point for the coinage of the Greek *polis* but also for the pre-Roman tribes of northern Italy, who copiously imitated that type until the first c. B.C. The motivations which lead to the introduction of this heavy denomination, and the date as well, have not been explored in depth yet. The aim of this work is to bring new data through a study of die links carried out on tens of specimens of heavy drachmas. Results for obverse/reverse and a quantitative estimate of the output of the Massalian mint for this denomination are presented. An analysis of the few findings, especially the hoard from La Courtine d'Ollioules (Var, France), and hoarding practices of silver in the Ligures sites [1] are investigated as well. Finally, a discussion about the relationships between the official drachm and the Massa α imitations [2] is provided. [1] M. Py, *Les monnaies préaugustéennes de Lattes et la circulation monétaire protohistorique en Gaule méridionale*, Lattes, 2006, p. 352. [2] J. Corsi and F. Barello, *Le prime dracme d'imitazione massaliota: nuove osservazioni su composizione e rapporti con la dracma pesante di Marsiglia*, in *Nummis Gallicis. Mélanges de numismatique celtique offerts à Louis-Pol Delestrée*, 2013, pp. 31–37.

106. CORSI, Jacopo, Università di Torino, Italy – **BARELLO, Federico**, Soprintendenza per i Beni Archeologici del Piemonte e M.A.E., Italy – **RE, Alessandro**, Università di Torino, Italy – **LO GIUDICE, Alessandro**, Università di Torino, Italy

New data for a compositional and metrological study of the Cisalpine Gaul's coinage

The pre-Roman tribes settled in northern Italy during Iron Age had a copious production of silver drachmas and a minor one of silver fractions. These coins are classified in several typologies according to stylistic features, and attributed to different tribes on the base of distribution maps [1-2]. However, many aspects of this coinage still deserve more efforts, such as die-links studies and datings, which are still tentative due to very few stratigraphic finds. Even metrology is a rather unexplored topic, being a complete study on average weights very recent [3]. To perform a complete metrological study of this coinage,

compositional measurements have been carried out with bulky neutron-based techniques on several specimens coming from hoards and collections, in the frame of a 3-years PhD project. Compositional data enabled to detect a silver debasement, which falls from the 98% of the first emissions up to the 50% of the Insubres late types. This inflation process could be related with the military efforts in the decades around the second Punic war and, afterwards, with the increasing influence of Rome in the Po valley. The silver loss can be also used to establish a relative chronology among different emissions, in agreement with the available archaeological evidences. [1] A. Pautasso, *Le monete preromane dell'Italia settentrionale*, Sibirium, 1966, 7, pp. 1-162. [2] E.A. Arslan, *La monetazione celtica cisalpina. Un nuovo quadro generale*, Sibirium, 1995, 22, pp. 179-215. [3] J. Corsi, *Weight loss of pre-Roman drachmas from northern Italy*, Numismatica Lovaniensia, 21, in press.

107. COUPAR, Sally-Anne, Hunterian Museum, University of Glasgow, United Kingdom

The Early Coinage of Corinth

My doctoral thesis (2000) aimed to elucidate the numismatic history of the city of Corinth from the inception of the coinage to the beginning of the Peloponnesian War in 431 BC. The method used in pursuit of the objective was to carry out a comprehensive die study which collected and analysed all known Corinthian dies with curved wing Pegasus type. Hoard and overstrike evidence was used to help order the sequence of the dies, as was the stylistic development. The numismatic, historical and archaeological evidence provided key dates which anchored the sequence and allowed the chronology of the coinage of Corinth to be revealed. This paper revisits the die study in the light of post-2000 evidence to test the strength of my earlier conclusions.

108. COX, Sarah, United States of America

Observations on Pirro Ligorio's Numismatic Manuscripts

Pirro Ligorio has been castigated as an unreliable witness, even a faker, but recent studies, including those of Ian Campbell and Patrizia Serafin, are beginning to reverse this opinion. My own examinations of the numismatic volumes in Turin and Naples reveal evidence of Ligorio's careful working methods, from choice of paper to editing. For example, the watermarks in the two collections are mostly different, suggesting Ligorio started his numismatic narrative largely from scratch after selling his collections to Cardinal Farnese and relocating to Ferrara. Though most of these manuscript folios are blue paper, some are white; the choice of color seems meaningful. Although containing corrections, the blue pages appear more finished than the white, which are often watermarked with different designs than on the blue. The white folios frequently lack a number in Ligorio's hand, unlike the blue, which have either Arabic numerals (Naples) or Roman (Turin). White paper is utilized for little inserts, reminiscent of To Do lists, and for sketches of coins. Those in Turin MS 17 bis often refer to the type and legend with written notes, but some have drawings. A number are of coins in Turin MS 21 and seem largely faithful to each other and to actual coins. Ligorio's close attention to details prompted meticulous editorial changes, including physically cutting and pasting text and/or drawings; some coin circles in Naples were even re-touched with added white. All of these actions provide evidence of painstaking care that should help further rehabilitate Ligorio's reputation.

109. CRISÀ, Antonino, University of Leicester, United Kingdom

Collecting coins and connecting collectors: government and social networks in the Kingdom of the Two Sicilies (1816-1860)

Recent archival research has revealed new data on the history of collecting and archaeology in northern Sicily during the nineteenth century, when Sicily was ruled by the Bourbons and annexed to the Kingdom of the Two Sicilies. Records show how collectors, dealers and diggers operated in this historical context, and authorities dealt with illegal excavations, acquisition of collections and exportations of finds abroad. The main scope of this paper is to pinpoint an unexpected system of networks in Bourbon Sicily, focused on two principal case studies. First of all, I outline the so-called 'Network of state authorities', which comprises regional and local authorities dealing with the supervision and management of Sicilian antiquities. Archival research has clarified how the Bourbons undertook accurate and careful safeguarding to achieve this aim and to protect the archaeology. To explore this, I use the valuable case study of Giuseppa Giammone (1832), who found and collected ancient coins in Giarre (Catania) without reporting them to the local authorities. Secondly, I trace how the 'Network of coin collectors' worked in terms of their social and historical context. Collectors then mainly increased their collections through excavations, exchanges and purchases, and kept in touch with each other by letters. Enrico Pirajno (1809-1864), a well-respected ancient coin collector based in Cefalù (Palermo), represents a strong case study on this subject, showing how networking was crucial to improve the value and quality of Sicilian collections.

110. CRISTEA-STAN, Daniela, National Institute for Nuclear Physics and Engineering, Bucharest, Romania - **OBERLAENDER-TARNOVEANU, Ernest**, National History Museum, Bucharest, Romania - **CONSTANTINESCU, Bogdan**, National Institute for Nuclear Physics and Engineering Bucharest, Romania

New information on Geto-Dacian silver coinage based on XRF analysis of coins' alloy

For coins, chemical differences that occur due to different metal sources and during preparation of alloys - found in their elemental composition - can be used for the identification of technologies and workshops and also to distinguish between originals and counterfeits. We illustrate with the case of 12 Dacian Radulesti-Hunedoara tetradrachms (Herakles head - averse, horseman - obverse, both strongly barbarized - see Constantin Preda, *History of coins in pre-Roman Dacia*, in *Romanian, Editura Enciclopedica*, Bucharest, 1998) found in the last years in the area of sanctuaries from Sarmizegetusa (ancient Dacian capital), coins having a high content in silver (73.2-90.2%) and an important presence of copper (3.1-19.3%), tin (3.8-7.3%) and lead (0.2-1.4%) - all constituents of ancient bronze alloys. These coins also have relevant traces of bismuth (0.2-0.8%), a fingerprint for Balkans silver minerals. A comparison with Radulesti-Hunedoara coins found in Dacian settlements relatively far from Sarmizegetusa, coins practically from bronze with a small quantity of silver (up to 10%), suggests Sarmizegetusa coins are produced to be votive depositions. Bismuth was detected in Thasos tetradrachms - mainly "barbarian" (Thracian) copies - also found in Sarmizegetusa, suggesting these were melted to be used to produce Radulesti-Hunedoara tetradrachms by alloying their silver with some quantities of bronze, a Celtic procedure we also found for Dacian silver adornments (including spiraled bracelets from Oradea and Herastrau). The possible significance of the Geto-Dacian silver coins - real coins? signs of power? tribal symbols? - will be discussed.

111. D'ANGELO, Giulia, Scuola Normale Superiore di Pisa/American Academy in Rome - **MARTÍN ESQUIVEL, Alberto**, Universidad de Salamanca, Spain

Un lingotto con il segno del "ramo secco" dalla Pinacoteca Civica di Ascoli Piceno

La collezione numismatica della Civica Pinacoteca di Ascoli nasce dall'unione del medagliere "Odoardi", donato al Municipio nel 1788, e una serie di elargizioni, acquisti e scambi, del quale fu promotore l'archeologo ascolano G. Gabrielli. La collezione, attualmente in corso di studio, vanta un esemplare di lingotto con il segno del "ramo secco" ancora inedito. Ricerche d'archivio rivelano che la presenza del pezzo nella raccolta si deve, probabilmente, ad un acquisto che il Direttore del Museo Civico di Ascoli, G. Gabrielli, effettuò intorno al 1896. In particolare, lo studio del carteggio Gabrielli-Pigorini sembra gettare luce sul suo possibile contesto di provenienza (un ripostiglio nell'Ascolano). A sostegno di questa ipotesi si osserva che l'unico rinvenimento sinora noto dall'area medio-adriatica è il pane con "ramo secco" da Offida (Loc. Tesino, Ascoli Piceno). Le caratteristiche tecniche del frammento (2767 g.) e la rarità di esemplari di questo tipo rendono la sua "scoperta" di grande interesse scientifico.

112. D'OTTONE, Arianna, Università di Roma 'La Sapienza', Italy

Arabic Coins from the Italian Royal Collection. Addenda to the Corpus Nummorum Italicorum

Vittorio Emanuele III (1869-1947), king of Italy, formed a very important numismatic collection (L. Travaini, *Storia di una passione. Vittorio Emanuele III e le monete*, Roma 2005), and this rich ensemble included Arabic coins (G. Oman, *Vestigia arabe in Italia*, in *Gli Studi sul Vicino Oriente in Italia 1920-1970, vol. 2: L'Oriente islamico*, Roma 1971). The royal collection was published in the twenty volumes of the *Corpus Nummorum Italicorum*, between 1910 and 1943, but not fully: for example, neither the Sicilian materials nor the coins minted abroad by Italians are included. This contribution aims at presenting, for the first time, some of the Arabic coins from the royal Italian collection, which have been preserved since 1971 in the Museo Nazionale Romano (Rome).

113. DAHMEN, Karsten, Staatliche Museen zu Berlin, Germany

The 1740 hoard of Roman denarii from Preussisch-Görlitz near Osterode in Eastern Prussia (Gierłoż/Ostróda in Poland). A find's history and coin catalogue based on a manuscript by Friedrich Wilhelm Stosch

The year 1740 saw the extraordinary find of 1,200 ancient Roman *denarii* of the 1st to 3rd centuries AD near the then Prussian city of Osterode. It raised so much attention that even the young king Frederick II, who just had succeeded to the throne,

demanded the hoard's transfer into his Royal collection. Less is known of the subsequent fate of the hoard, which was acquired by the cabinet in November 1741 and was thoroughly described between 1765 and 1795 in a detailed catalogue by F. W. Stosch; a manuscript which still is kept in the Münzkabinett. Both contemporary testimonies – transfer papers and catalogue – plus printed reports from the period will be discussed and analysed. They allow for the rare case of a detailed description of the hoard's composition, which is even the more valuable as most of the coins were later exchanged for better specimens. Nevertheless some of the original coins can be identified in the cabinet's collection today.

114. DARLEY, Rebecca, University of London, United Kingdom

“All that glitters”: the Byzantine solidus 307-1092

This paper will discuss a project to undertake XRF analysis on high-purity Byzantine gold coins from the comprehensive collection of the Barber Institute of Fine Arts, Birmingham. The aims of the project, in collaboration with Bruker Industries, the University of Birmingham Department of Chemistry, and Robert Bracey of the British Museum, are to obtain data concerning the precise purity and trace element composition of the Byzantine *solidus* A.D. 307-1092, and to test systematically a range of questions concerning the interpretation, reliability and precision of XRF analysis of gold. The methods proposed for this study will be presented alongside the results of pilot phases of research. In particular, the experimental strategies being developed to assess levels of surface enrichment in gold will be discussed in detail, as will a comparison of the effectiveness of a variety of different machine configurations for testing high purity gold, providing material of relevance for studies examining high-purity gold of any period or region. Historically, the initial pilots of this study focus on assessing the purity but also the precise elemental composition of a range of coins distributed evenly between the reigns of Constantine I and Alexios Komnenos. Results will therefore include data on gold content, to supplement and refine existing knowledge, and an indication of the trace elements found in Byzantine coins across time and how these changed. Interpreting the meaning and utility of these trace elements as evidence for historical processes is one of the core long-term aims of the project.

115. DARVISHI, Farangis, Islamic Azad University, Kazeroun, Iran

A study of the Names of Mints Found on Sasanian and Arab-Sasanian Dirhams in Bishapur Museum

The present study presents 48 Sasanian and Arab-Sasanian dirhams belonging to the collection of museum of the historical city of Bishapur in Fars province; 31 coins were minted by Sasanian kings, while 17 coins belong Umayyad governors. Name and location of different mints engraved on these coins are investigated from an analytical- comparative perspective. This study is an attempt to remove the possible ambiguities with respect to the accurate name and geographical location of some of the mints in Sasanian and Umayyad eras recognized on the dirhams found in this collection. After the conquest of Sasanian Empire by Muslim Arabs in the second half of the 7th century A.D., Bishapur state in Fars province, as many other cities of Iran, was under the jurisdiction of the Umayyad. Umayyad governors minted coins now known as Arab-Sasanian coins. Fars province encompassed the largest number of mints, all very active, where a great deal of Arab-Sasanian coins were produced. This study further aims at investigating a few Arab-Sasanian coins in Bishapur Museum, with the objective of determining power and status of some Umayyad officials in Bishapur region.

116. DAY, William, Fitzwilliam Museum, University of Cambridge, United Kingdom

The Roman Senatorial Gold Ducat

Since the work of Capobianchi, Martinori and the compilers of the *CNI*, the classification of the Roman Senatorial gold ducat has undergone little change. This paper summarises the literature on the Roman Senatorial ducat, presents the evidence on the coin from merchants' manuals, documentary records and especially coin hoards, proposes refinements to the classification, the considers the prospects for further research.

117. DE BENETTI, Massimo, Italy

The Alberese hoard: seventy-six gold florins of the second half of 13th century

Mint activity in Florence is exceptionally well-documented from the beginning of the fourteenth century until the end of the republican era in 1533, most notably in the so-called Fiorinaio or Libro della Zecca, a register of mint personnel and the privy

marks used on the coins. The mint scribe who began the Libro della Zecca and assembled the earlier material going back to 1303 was nevertheless unable to find much information on the mint and its coinage before that time. To narrow down the dating of these early florins, it is necessary to turn to the hoard evidence. The Alberese hoard of seventy-six gold florins, discovered in 1932 near Grosseto-Italy, is exceptionally important because it adds to the small number of known florin hoards that were closed during the coin's first half-century (Pisa, Aleppo, Akko, Pavia). In fact, it is the only one completely recovered (most of the coins of other hoards were dispersed in the antiquarian market). Although originally dated to 1347, this new study clearly establishes that the hoard was closed before 1290-95, making it a good sample for the study of gold florins of the period of "unknown mintmasters". Closer examination of privy marks, epigraphy and style of coins reveals new data. Some privy marks can better be identified with those described in the Libro della Zecca not previously identified and it is possible to propose a possible chronology of different issues. Research on documents of that time has also revealed the possible origins of the hoard.

118. DE BENETTI, Massimo, Italy

Roselle. Nuovi dati dai rinvenimenti numismatici (poster)

Città etrusca, romana e poi medievale, Roselle, nell'arco di più di cinquanta anni di attività della Soprintendenza per i Beni Archeologici della Toscana, ha restituito una grande quantità di materiali. La catalogazione e la pubblicazione nel 2013 di buona parte dei reperti numismatici nel volume *"Roselle: le monete dagli scavi archeologici (1959-1991) e dal territorio"* (a cura di M. De Benetti e F. Catalli) ha permesso di tracciare un quadro più esaustivo della diffusione e circolazione della moneta antica in questa parte d'Etruria che vede tra le più antiche attestazioni esemplari di zecche campane ed etrusche (IV-III secolo a.C.) ed un consistente numero di monete del periodo repubblicano, quando Roselle conobbe un rinnovato sviluppo (II sec. a.C.) successivo alla conquista romana del 294 a.C., e della prima età imperiale, in concomitanza con la crescita e la monumentalizzazione della città (I sec. d.C.). La presenza di moneta è abbondante per tutta l'età imperiale, con un picco di attestazioni nella seconda metà del III secolo ed una riduzione evidente nel IV secolo, quando in città cessarono nuove attività edilizie. Dopo un vuoto di alcuni secoli, l'evidenza numismatica riappare alla fine dell'VIII secolo, con un denaro di Carlo Magno, e più tardi con esemplari di XI e XII secolo, a ricordare il ruolo avuto da Roselle come sede vescovile fino al 1138, prima di cadere definitivamente in rovina. Adesso, ulteriori rinvenimenti aggiungono nuove informazioni al quadro già delineato.

119. DE LISLE, Chris, Oxford University, United Kingdom

Halting the Despot's Progress: Continuity in Agathoklean Coinage

Agathokles of Syracuse's coinage is usually arranged into three periods, as originally proposed by Head (1874) and modified by Gabrici (1927), Jenkins (1968), Buda (1969/70), and Ieradi (1995-1996). This periodisation is based on the procession of Agathokles' coin legends from ΣΥΡΑΚΟΣΙΩΝ to ΑΓΑΘΟΚΛΕΙΟΣ to ΑΓΑΘΟΚΛΕΟΣ ΒΑΣΙΛΕΥΣ. Freeman (1894) called this the "despot's progress", a process suggested by the literary sources. In this progress, Agathokles' iconography appears to grow gradually more absolutist and/or Hellenistic over the course of his reign (recently Lehmler (2005) 65-68; Zambon (2006) 77-94). I suggest that this progress has been overstated, and that the value of the legends as a dating criterion has been overly rigidly applied. Instead I propose a two period chronology which better fits the hoard and weight data, the evidence for the duration of issues, and the wider Mediterranean context. I further argue that the iconography of Agathokles' coinage did not move from Sicilian models to Macedonian ones, but that he consistently chose types with both a Sicilian and a Macedonian resonance throughout his reign. Finally, my analysis of the geographic distribution of Agathokles' coinage as evidenced by small finds and hoards indicates that Agathokles' different issues have different distributions, opening the possibility that his coinage should be understood not as a single iconographic programme but as several different programmes aimed at different audiences.

120. DEGLER, Adam, The Ossoliński National Institute (Ossolineum), Poland

Aureus of Postumus with owner's graffito (Gounthios)

Pierced aureus of Postumus with graffito proclaiming that Gounthios was its owner is an extraordinary coin. It was acquired by the Ossolineum in Lviv' in the latter part of the 19th century. It could have been found in Eastern Galicia (then part of Austrian Empire, today's western Ukraine), since Lviv' was the main centre of this region in that time and great number of coin finds came to the Ossolineum from Austrian authorities. Unfortunately, no exact data on the circumstances of its discovery are known. Piercing indicates that it was used in the Barbaricum as a pendant and Gothic name, as well as Lviv' provenance,

points to the circle of Chernyakhiv culture and the latter part of the 3rd century A.D. On the other hand, the graffito as an epigraphic source can point to the Late Roman period. Most probably, the coin belonged to the member of Gothic power elite. It is a good example of the role the analysis of the secondary treatment of a coin can play in numismatics.

121. DELL'ORO D'AMICO, Federica, Università di Messina, Italy

Le Puellae Faustinianae nella monetazione di età antonina

L'ampio spazio riservato nella monetazione a Faustina I durante la cosiddetta "Golden Age" di Antonino Pio, e il rinnovato interesse di cui le *Augustae* hanno goduto presso la comunità scientifica negli ultimi anni, ci inducono ad approfondire l'analisi dell'istituzione delle *Puellae Faustinianae*. Obiettivo del lavoro è quello di acclarare determinati aspetti della politica umanitaria degli imperatori Antonini, ampiamente pubblicizzata attraverso i tipi monetali presenti al rovescio. Una preliminare indagine permette di notare l'alta percentuale di monete battute nel nome di Faustina *Maior* prima e, alla sua morte, nel nome della *diva* Faustina, serie nelle quali si inseriscono le emissioni recanti al rovescio la legenda PVELLAE FAVSTINIANAE. Assai utile si rivela un approccio scientifico interdisciplinare che coniuga le testimonianze numismatiche con i dati deducibili dalle testimonianze storiografiche ed epigrafiche, con lo scopo di verificare l'interferenza tra realtà femminile e dinamiche politiche, in concomitanza con iniziative evergetiche e rapporti di *matronage* volti a rafforzare l'immagine e il potere delle *Augustae* nella politica imperiale.

122. DELOUM, Said, Université d'Alger 2, Algeria

Le trésor monétaire de Guernine (Djendel-Algérie): étude historique et monétaire

Ce trésor monétaire, inédit a été découvert dans la région de Guernine à l'ouest d'Alger. Il a été découvert fortuitement dans un petit pot en terre cuite. Il est composé de 130 pièces de monnaies, toutes en bronze, très bien conservées. Après l'étude préliminaire, nous avons constaté que ce lot monétaire est très homogène. De pièces de monnaies d'*Aes* IV les plus anciennes sont les types de GLOR-IAEXERC-VRBS-ROMA et CONSTAN-TINOPOLIS datant de 330-335. Par contre, les types les plus récents sont représentés par les VICTORIAE DDAVGGQNN (Deux victoires face à face tenant chacune une couronne et une palme) et VOT-XX/MVLT-XXX (Vœux dans une couronne), des Empereurs CONSTANS et CONSTANTIVS, en 341-348. Nous noterons, la présence de presque tous les types monétaires de la période Constantinienne tels que: GLOR-IAEXERC-ITVS CONSTAN-TINOPOLIS, DVCONSTANTI-NVSPTAVGG (Quadriga), VN-MR (Empereur debout voilé à droite), SECVRITAS-REIP (Sécuritas debout de face tenant un sceptre et s'appuyant sur une colonne), et les VOT-XV/MVLT-XX. Nous relevons, aussi, la présences des ateliers monétaires orientaux et occidentaux, tels que: Alexandrie, Antioche, Cyzique, Nicomédie, Héraclée, Thessalonique, Aquilée, Rome, Arles et Lyon. Vu la rareté du matériel, la richesse numismatique des réserves de nos musées et le manque de publications en Algérie, ainsi que presque dans toute l'Afrique du Nord. Nous avons jugé utile de faire connaître ce trésor inédit et de partager les informations avec nos collègues numismates et de verser cette découverte monétaire au dossier des trouvailles monétaires du IVème siècle en Afrique du Nord.

123. DEMIREL GÖKALP, Zeliha, Byzantine Anadolu University, Turkey

Coins in Kütahta Museum from Turkey (poster)

In the study made in Kütahta Museum (in the ancient province of Phrygia) in 2013, 1415 Byzantine coins were determined. There are 38 gold, 7 silver, 1250 bronze and 15 billion coins in the collection. In addition, there is a hoard consists of 41 billion coins and also another hoard consists of 59 of gold coins in the Museum collection. Bronze coins that were identified in the Archaeological Museum of Kütahta were calculated with the formula of "coins per period / period length x 1000/total". With this formula, it is analyzed that in every 1000 coins annual loss of coins is identified. 13 cycles have been determined for periods. The vast majority of datable 1229 bronze coins which were identified in the Kütahta Museum and dated back to Byzantine period show parallelism with the history of the region and date to the Early and Middle Byzantine period. However, there is an outstanding result which is surprising for Anatolian-wide and not for the ancient Phrygia Region of Kutahya. Especially after the years 717-802, coin rates rising shows an increase Anatolian-wide. Again almost for all regions we have encountered a decrease in Byzantine coins circulation in Anatolia, counting is observed as 1081 pieces for the year 1071 in Kütahta findings. As the bronze coins were evaluated except from gold, silver, billion and two treasures in the Museum collection, Byzantine coins circulation is open to new interpretations in terms of Kütahta in particular and across Anatolia.

124. DERGACIOVA, Lilia, Academy of Sciences of Moldova

The new coin hoards' discoveries in the Republic of Moldova. Local money circulation & regional trade pattern

The four coin hoards have been recently found in the village of Cuhurestii de Sus (Floresti district, Republic of Moldova) on the territory of about 40 to 50 m². The first coin hoard consists of 21 Moldavian one and half groats of Alexander I, one Polish half-groat of Wladislaw II Jagiello and seven Prague groats of Wenzel IV (III). The second coin hoard consists of one and half groat of Alexander I and Ilias I (each) and 13 Prague groats of Wenzel IV. The third coin hoard consists of 17 Moldavian groats of Stephen III (1457-1504), one Genoese-Tartar asper, one Crimean Khanate asper of Haci I Giray and two Golden Horde aspers countermarked in Asprokastron (Cetatea Alba). The fourth coin hoard found dispersed was consisting of two Prague groats of Wenzels IV, one Wallachian ducat of Vladislav II, four groats of Stephen III, one Golden Hoard asper countermarked in Asprokastron and four Crimean Khanate aspers of Haci I Giray. The first two coin hoards were deposited in the early 1430s. The two other hoards were hidden at the time of Stephen III. Neither medieval ceramic nor other artefacts were found nearby the hoards. The numismatic data together with another coin hoard from Cuhurestii de Sus hidden in the middle of the 15th century, indicates that the nowadays village could be used as a temporary camp on a commercial road. That medieval road was connecting North-East Europe and the Italian colonies in Crimea, particularly Caffa.

125. DESTROOPER, Anne, Cyprus

Monnaies des fouilles du Departement des Antiquités de Chypre à Kourion; les monnaies datant de la fin des cités-royaumes

Dans la publication des fouilles du Département des Antiquités de Chypre à Kourion, j'ai présenté les monnaies par numéro d'inventaire pour mieux comprendre le contexte archéologique. À présent, je les présente dans le contexte numismatique. Seules quelques monnaies sont datées d'avant 310 av. J.-C., date de la fin de l'indépendance des cités-royaumes de Chypre. Elles sont discutées dans le contexte des autres monnaies trouvées à Kourion et dans d'autres fouilles importantes à Chypre, à Paphos, à Amathonte, à Kition et à Salamine.

126. DHARMADHIKARI, Jay, France

Le monnayage tétrarchique d'Alexandrie de 303/304 à 307: découvertes récentes et nouvelles hypothèses

The coinage issued in Western and Central mints of the Roman Empire during the last years and the immediate aftermath of the First Tetrarchy until the Conference of Carnuntum (308) has been recently revisited. The mint of Alexandria seems in comparison less well known for this period despite an imaginative and religious imperial programme for both *aurei* and *nummi*. The new iconography initiated in 304 or possibly as early as 303 testified that the Tetrarchic doctrine based on the cults of *Herculii* and *Iovii* within the imperial family of *Augusti* and *Caesares* was then reinvigorated. A certain number of new varieties have also recently been discovered since the publication of the *Roman Imperial Coinage VI* in 1967 without being sufficiently publicized. Last but not least, for the time of early 307, recent findings revealed an iconography of *Concordia* which is politically meaningful for the relationship of Maximinus Daia Caesar with both *Augusti* Galerius and Severus. This paper aims at presenting a few new and original hypotheses based on the research conducted for and since the publication of two communications in the *Bulletin de la Société française de numismatique* in 2009 and 2013 on Alexandria and the iconography of *Concordia* during the late Tetrarchic period.

127. DI JORIO, Francesco, Università di Roma "La Sapienza", Italy

Il culto di Cibele in Gallia: preesistenza di un culto o diffusione di tipologie da Roma verso la "periferia" dell'impero? L'evidenza numismatica di Avennio

L'introduzione del culto di Cibele a Roma ha seguito un "percorso" che ha il suo punto di partenza da Pessinunte per giungere poi sul Palatino. Invece a Lugdunum (Gallia Lugdunense) si trova il più importante santuario dedicato alla Dea Madre nelle province occidentali dell'impero romano. A Roma le prime emissioni con testa femminile e corona turrata si ritrovano sulla serie semilibrale romano-campana (218-213 a.C.): la testa femminile con corona turrata riprende l'iconografia monetale delle città dell'Asia Minore, dove la *Tyche* è raffigurata su emissioni locali. Essa compare sulle monete 10 anni prima rispetto alla data ufficiale di introduzione del culto a Roma (204 a.C.). Quelle invece relative a Cibele in senso proprio sono della fine del II sec. a.C. (102 a.C.). Tuttavia in alcune emissioni della celtica Avennio (Gallia Narbonense) compare una testa femminile turrata e un toro. Esse sono datate alla prima metà del I sec a.C. da Eugene Duprat nel 1910 che le ha studiate, ritenendo che la

divinità turrita potesse essere assimilata più a Copia che a Cibele. In realtà le stesse emissioni sembrano riprendere esattamente le identiche tipologie emesse precedentemente a Roma. Il senso dell'intervento è quello di chiarire se ci si trova in presenza di una "scelta" di tipologie operata per imitazione, oppure se la presenza di una divinità femminile turrita e un toro (che ritengo possa rappresentare Cibele) attestata dalle monete di Avennio non faccia altro che confermare la conclamata diffusione del culto della Dea Madre a partire dalla Valle del Rodano (Marsiglia) in tutto il resto della Gallia, piuttosto che mettere in evidenza la diffusione del culto in Gallia a partire da Roma.

128. DIMA, Mihai, National Bank of Romania

Coin circulation in the Lower Danube area during Trajan's reign

The author presents the main features of coin circulation in the Lower Danube area during Trajan's reign, based on coin hoards and isolated coin finds from multiple sites in Dacia and the northern part of *Moesia Inferior* that were only operational during the first two decades of the 2nd century A.D. The isolated coins were found during archaeological excavations in Vărădia-“Chilii” and Vărădia-“Pustă” (Caraş-Severin county, Romania), Rucăr (Argeş county, Romania), Drajna de Sus (Prahova county, Romania) and Mălăieşti (Prahova county, Romania), in forts and civilian settlements built in their immediate vicinity. These sites could be separated into two groups. Earlier sites predominantly throw up coins from before Trajan, of which those issued during the Julio-Claudian dynasty are present in significant numbers. The other group of sites is characterised by a preponderance of more recent coins issued under Nerva and, in particular, Trajan.

129. DOBROVOLSKAYA, Lidia, The State Hermitage Museum, St. Petersburg, Russian Federation

Russian-French International Contacts in the late 19th cent. (based on the Hermitage collection)

Development of friendly communications between Russian Empire and France led to formation of the Franco-Russian Alliance. The most significant moments of this process were reflected in different arts including the medal art. In the collection of the Numismatic Department of the Hermitage there are a great number of commemorative medals, jettons and badges, dedicated to these events. French exhibition in Moscow, visit of French squadron to Kronstadt in 1891 and the reciprocal one to France in 1893 were among the first steps on the way of the development of the Russian-French international contacts. An outstanding artists (Chaplain, Roty, Dupuis, Rivet, de Chavannes, ect.) were among the creators of medals devoted to this friendship. Of a special interest are personal medals, presented in 1893 to admiral F.K. Avelan and some officers from the crews of the ships Russian squadron, now in the Hermitage collection. Documents from Navy Archive contain information on this visit as well as biographies of officers. Of great importance were also other reciprocal visits of heads of states, statesmen and delegations from both countries, noted also by medals creating. These events were marked by jettons as well. They were made of different metals and alloys - silver, copper, brass, tin-plate with colour enamels. Great numbers of them are with tsars or presidents portraits and coat of arms of both countries. Some of them have ornaments in the shape of silk tapes painted in the colours of national flags. Their subjects and symbols performed the functions of commemoration and of proclamation.

130. DOWLER, Amelia, The British Museum, London, United Kingdom

Bithynian Bronze Coinage under Prousius I-II

This paper examines the bronze coinage of the Hellenistic kingdom of Bithynia. Many mints increased their output of bronze coinage during the Hellenistic period. In the case of Bithynia, the largest issues of bronze coins occurred during the reigns of Prousius I and II. At this period a wide variety of types were produced marking a departure from previous Bithynian production. There are a number of questions which arise from an examination of these coins and I have selected two main areas of focus. Firstly, the circumstances of production. This paper examines which coins were minted under Prousius I and II, where, and at which periods. This is a question which has historically been difficult to assess for most of the bronze issues of this period due to the lack of differentiation between the inscriptions. This discussion leads onto the second area of analysis: the place of these coins within the general economy of the kingdom, and alongside the production of Bithynia's silver coinage.

131. DOWLING, Melissa Barden, Southern Methodist University, United States of America

The Letter E at Delphi: a reconsideration of Plutarch, Faustina and the appearance of the mystery on Roman coinage

The sanctuary of Apollo at Delphi was decorated with a prominent but gnomic single letter, an *epsilon*, originally made of wood and attributed to the Greek sages. The Athenians installed an *E* of bronze and Livia installed one in gold. Plutarch wrote a dialogue (*de E apud Delphos*) walking the reader through various interpretations of this phenomenon, leaving the reader to decide its true meaning according to his own level of preparedness. He presents the priest Nicander who argues that the *E* stands for the Greek “if”, to represent the way in which questions are posed to the oracle. Another proposes that in astronomy *E* stands for the sun, so the letter is used to indicate the connection between Apollo and the sun. Yet another offers the idea that *E* is the fifth letter in the Greek alphabet and that the number five has special significance to philosophers and scientists: the five senses of man, five is a privileged place in musical harmonics, there are five elements in nature according to some systems, etc. The Delphic *E* was significant enough that Faustina the Elder issued a coin showing the letter between the columns of the temple. This paper will analyze the changes in worship at Delphi that illuminate Roman interest in the *E* in person, in literature and on imperial coinage.

132. DOYEN, Charles, F.R.S.-FNRS / UCLouvain, Belgium

Pondera online: a digital database of the commercial weights found in mainland and insular Greece, and dated from the classical and hellenistic periods

The study of commercial weights, which developed in the second half of the 19th century (Hultsch 1862; Pernice 1894), is most of the time not taken in account in economic archaeology, although recent research has shown that these *instrumenta* are fundamental to understanding the functioning of both Classical and Hellenistic economies. 20th century archaeological excavations have brought to light many weights, which have been more or less comprehensively published, but which have rarely been studied as a series—with some exceptions, such as the weights from the Athenian *Agora* (Lang 1964) or from Olympia (Hitzl 1996). Nowadays, the available material represents more than 2,000 weights, half of them from public and private collections, half of them from archaeological excavations; many weights remain unpublished. Dispersed objects, disparate information and imprecise data together constitute a major obstacle to a comprehensive approach. The creation of an open access database is intended to fill a gap in the collection, standardization, and processing of these archaeological data. The MySQL tool (<http://sites.uclouvain.be/pondera>) makes it possible to encode precise data in a dozen complex fields (denomination, place of origin, place of provenance, place of conservation, dating, archaeological description, inscriptions, metrological analysis, bibliography, and photography), to search for information in various ways, and finally to create distribution graphs and maps. Our paper aims to demonstrate how the building of such a formatted database is a necessary prerequisite to the global study of this material.

133. DRAGANOV, Dimitar, Numismatic Museum Ruse, Bulgaria

The coinage of Anchialus: iconography (poster)

The ancient city of Anchialus (today's Pomorie) was located between the old Greek West Pontic colonies of Mesembria and Apollonia. It probably emerged as a trade settlement back in the pre-Roman period, but the great upsurge of Anchialus started with the proclamation of Thrace for a Roman province in 45 AD. At the time of Trajan, Anchialus, along with some other cities in Thrace, received a city status and added to its name the family one (*Ulpia*) of the emperor. Anchialus began its coinage under Antoninus Pius. Coin issues are known with the names of the following emperors and members of their families: Antoninus Pius, Marcus Aurelius, Faustina Junior, Lucius Verus, Lucilla, Commodus, Crispina, Septimius Severus, Julia Domna, Caracalla, Geta, Maximinus I, Gordian III, Tranquillina. There is the standard work of M. Strack (AMNG II/1, Berlin 1912) for coins of Anchialus. However, over the past century thousands of new specimens containing new coin types and variants have been found. The need for a new complete study of the production of this mint, is obvious. This presentation includes all iconographic types (both published and unpublished) of Anchialus' mint. It is based on the study of the largest collection of coins of Anchialus - that of the Numismatic Museum Ruse (ca. 1000 specimens) – as well as on a number of coins from other museum and private collections.

134. DROST, Vincent, The British Museum, London, United Kingdom

The Seaton Down Hoard (UK, Devon): c. 22,000 nummi to AD 348

The Seaton Down Hoard was discovered in November 2013 near Seaton (Devon) whilst metal detecting. The find was promptly reported to the Portable Antiquities Scheme which enabled archaeological excavation of the hoard prior to its study at the British Museum. The hoard is made of approximately 22,000 copper alloy coins dating from the AD 260s to the AD 340s. The vast majority of the coins are *nummi* struck in the AD 330s (mainly the GLORIA EXERCITVS type struck for Constantine I and his sons as well as the VRBS ROMA and the CONSTANTINOPOLIS commemorative series). The latest coins are a handful of *nummi* bearing the VICTORIAE DD AVGGQ NN reverse type. Such Constantinian period hoards are not uncommon, especially in Britain. However, Seaton Down is one of the largest of its kind within the whole Roman Empire. Very few large hoards of this period have been fully studied. The first aim of this paper is to provide detailed analysis of the composition of the Seaton Down hoard and to make a comparison with other contemporary hoards. Furthermore, this gives the opportunity to examine the patterns of coin circulation in Britannia in the mid-4th century (supply of official coinage from Gaul, diffusion of contemporary copies). The dating of specific issues will also be discussed. In particular, the dating of the last issues present in the hoard is essential to suggest potential reasons for the concealment.

135. DUTTA, Debajit, Jadavpur University, Kolkata, India

Minting Technology of the Medieval North-East Indian States: Focus on the Koch Coin Mints and their Technology

While looking back at the glorious past of the Indian independent states in the pre-colonial era, the kingdoms of medieval North East India must demand special attention. Besides their splendid achievements in politico-cultural spheres, they were equally successful in economic domain. Because most of these kingdoms understood the essence of a state-sponsored currency system and what resulted into the introduction of an extensive series of coinage of their own. Among these states the Koch Kingdom demands special attention because it took the initial steps for a regularized currency of their own and the other states of North East India followed the practice. The process of minting coins by these kingdoms appears as an interesting episode of historical investigation in terms of writing technological history. The paper will focus on how hammering, cutting, blanching and striking were performed in different stages and what were the tools involved in making coins. The study will also focus light on the scientific examinations of the coins to get an idea about the technology involved in manufacturing coins, indigenous technologies and technological acculturation for making coins by the North-East Indian kingdoms especially by the Koch kingdom. The paper will also scrutinize the metallurgical formation of the coins, the preparation of metals, the engraving of dies, the presence of quality controllers, technological change in manufacture process, size and weight variations of the coins in different periods due to technological ground.

136. DYMOWSKI, Arkadiusz, University of Warsaw, Poland

The inflow of Roman Republican coins to the territory of present-day Poland

Roman Republican bronze coin finds from Poland include at least four stray finds. Bronzes from the 3rd-2nd centuries BC probably came to our territory before the end of the 2nd century BC, in connection with some kind of Celtic activity. Silver coinage of the Roman Republic is represented by three hoards of *denarii*: Połaniec (160 coins), Włodzienin (400 coins) and Święte (5 coins). Two of these hoards contained also *denarii* of Augustus. Stray finds include some 150 Republican silver pieces and 3 Augustan *denarii*. It is quite possible that most of these coins might have reached the Polish territories no sooner than in the 70s BC and not later than during the reign of Augustus. After that there was likely a distinct break in the inflow of Roman silver coinage to the Polish territory; it is likely that between the periods of reigns of emperors Augustus and Trajan only a few if any Roman *denarii* were brought to our region. Perhaps the phenomenon of influx of Roman Republican (and Augustan) silver coinage to the Polish territory, probably from Dacia, should be linked to the direct involvement of the tribes of the Lugian federation (inhabiting central and southern parts of present-day Poland in the younger pre-Roman Period and the early Roman Period) in important political events taking place in the area south of the Carpathians. One cannot discount either that Celts played an important role in organizing the long-distance trade what could have been connected with an influx of Roman *denarii*.

137. EHRNSTEN, Frida, National Museum of Finland

Thank You for Not Breaking the Law! Metal detectors and coin finds in Finland

Metal detecting as a hobby has evolved substantially during the last few years in Finland. The equipment becomes better, the detectorists more organized and the number of finds is multiplied by many times. For numismatists, this means a fast growing number of research material, especially concerning the Viking Age (800-1050). Like every country we do however have to face the challenges deriving from the use of metal detectors. Do we understand the context of the finds, and more importantly, do we get information of all the finds made? How can we interpret this new material? Furthermore the law and the policy of the National Board of Antiquities are undeniably anachronistic and need to be updated. Where should we go in the future; ban, free or control? In the media the finds made by metal detectorists seem to be more newsworthy than finds made by archaeologists. The coverage, and at least the discussion afterwards, most often includes some kind of juxtaposition between the hobbyists and the professionals. Do we have to be on different sides of an invisible line, or is it possible to work together? The coins found by metal detectorists form an excellent platform for studying this phenomenon. Compared to many other countries the amount of coin finds in Finland is small, but they do however give us valuable information of the use of coins throughout history. Does this make it worth the while?

138. EIKJE, Linn, Stockholm University, Sweden

Economic change in middle age Norway 1103-1263

From the early 12th- until the late 13th century the only coin type issued in Norway was bracteats. These small pieces of silver are bringing with them little or no information concerning issuer, time of issue or place of production. The lack of information is reflected in a gap in our knowledge about the role of these coins in Norwegian medieval society. Hence many questions concerning economic change and development in middle age Norway remain unanswered. To lead the discussion on it is vital to establish new knowledge about chronology, coin-issuing authority and mints. This forms the basis of my PhD-thesis. Furthermore my aim is to activate this information together with information about archaeological context, to reveal how, where and when the bracteates were used in Norwegian medieval society.

139. ELFVER, Frédéric, Stockholm University, Sweden

Die export between Denmark and the Slavonic area during the 11th century

The production of dies for minting during the Viking Age must be considered as expensive and time consuming. Used dies could sometimes be traded outside the original circulation area. It is known that dies were exported from the Anglo-Saxon area to, for example, Sigtuna in Sweden and Lund in Denmark. Dies could also be traded within a country, which is known from Lund and Odense in Denmark. In this paper I will discuss the evidence for die-export between Denmark and the Slavonic area that have been uncovered through my die-studies of Danish coins from Lund and the 1030's and 1050's. These studies show that two dies, one obverse and one reverse, have been exported from Denmark to the Slavonic area in the northern parts of today's Germany and Poland, where they have been re-used and later on combined with a die with a local motif. The paper will also discuss the evidence of different minting techniques with the same pair of dies. The issue how we can understand this type of die export is raised. The new evidence is, combined with finds of other archaeological material, interpreted as signs of cultural interaction between Denmark and the Slavonic area during the Viking Age.

140. ELKINS, Nathan, Baylor University, United States of America

The Communication of Power in the Reign of Nerva

Nerva, who ruled for sixteen months between the assassination of Domitian and the accession of Trajan, has often been treated as a mere placeholder in Roman history. There is not same wealth of historical sources for Nerva's brief principate as there is for the Flavian emperors and Trajan. And unlike the Flavians and Trajan, Nerva was unable to carry out an extensive building program and articulate a widespread ideological program in monumental arts such as relief sculpture and statuary. As a result, scholarship on Nerva has focused on his poor relationship with the armed forces, the succession crisis, and his adoption of Trajan. Fewer studies have attempted to explore the ideology that Nerva wished disseminate about his principate. The reverse iconography of Nerva's coinage is the most complete record of the ideals communicated about his rule. In spite of his short reign, Nerva's coin iconography is diverse and, therefore, allows a thorough examination of the different messages that Nerva

sought to disseminate. The abundance of lists of excavated coin finds from the northwestern provinces and the unpublished list of coin finds from Rome also allows for an exploration of audience targeting. Research has already indicated some evidence for audience targeting in Nerva's reign; coins celebrating domestic agendas appear to be more prominent in Rome and Italy, while those celebrating abstract ideals are common everywhere. The quantification of excavated finds also highlights the types of images that played the greatest role in Nerva's imperial ideology.

141. ELLITHORPE, Corey, The University of North Carolina at Chapel Hill, United States of America

Striking a Dissonant Chord: The Geographical Targeting of Trajan's Debellator Coinage in Dacia

It has long been argued that little or no evidence exists to suggest that the coinage of the Roman Empire was tailored to a particular geographical audience. What this paper argues is that geographical targeting of particular types to particular regions can, in fact, be identified. What are examined here are the coinage issues of Trajan that clearly portray his conquest of Dacia (at times in an especially humiliating manner) and their dissemination to the Roman world. What I argue is that a clear preference existed that Trajan's *debellator* coinage be distributed to the newly incorporated Roman province of Dacia, more than any other region of the empire, as a form of political communication from the emperor to his new subjects, highlighting the deliberate and highly orchestrated system of numismatic propaganda at work in the Empire. As currently no database exists to allow the numismatist to readily examine large-scale coin find data, it was imperative that one be compiled. This paper draws from such an exclusive database, for which I have collected and catalogued archaeological data and provenance for over 250,000 Roman Imperial coins (each represented via GIS mapping) minted during the Principate (27 BC–235 AD) from 38 countries.

142. EMMERIG, Hubert, Universität Wien, Vienna, Austria

Der Beitrag der schriftlichen Quellen zur Frage der Monetarisierung des frühen Österreichs im 11. und 12. Jahrhundert

Die Münzfunde belegen, dass durch die Einrichtung von Münzstätten in Krems, Neunkirchen, Enns und Friesach in der 1. Hälfte des 12. Jahrhunderts eine Monetarisierung des österreichischen Raums in Gang gesetzt wurde, die bereits in der 2. Hälfte des Jahrhunderts einen ersten Höhepunkt erreichte. Auch die schriftlichen Quellen, insbesondere Urkunden und Traditionsbücher, die aus dieser Zeit bereits in nennenswerten Zahlen vorliegen, beleuchten diese Entwicklung. Nennungen von Zahlungen in Silber nach Gewicht oder in Pfennigen, die Fixierung von Zinsen und weitere Belege für Geschäfte erlauben es, das bisher vor allem anhand der Funde beobachtete Phänomen aus dieser anderen Perspektive zu betrachten.

143. ESTIOT, Sylviane, Centre national de la Recherche Scientifique, France

Gold and celebrations: the festive emissions of Carus, Carinus and Numerianus at the mint of Siscia

Few things are known for the reign of Carus *et sui*. Written sources are either rare (Zosimus' account has disappeared with the ms. lacuna in his first book) or biased (*Historia Augusta*). Numismatics offer the best first hand documentation, but the reference book - RIC V.2 - is unreliable. A corpus of the festive coinage struck in the mint of Siscia in the perspective of imperial *donativa* is given and examined for the light it sheds on chronology.

144. ESTRADA-RIUS, Albert, Museu Nacional d'Art de Catalunya / Gabinet Numismàtic de Catalunya, Spain

Fabricar moneda en la Barcelona del ochocientos, la ceca de Barcelona revisitada

La casa de la moneda de Barcelona reabrió sus puertas en 1808 y, durante buena parte del siglo XIX, mantuvo una activa producción monetaria impulsada por las necesidades y por las reivindicaciones locales. La presencia de destacados emprendedores procedentes del sector privado a su frente -Juan de Amat o Francisco Paradaltas- garantizó su carácter de centro innovador que actuó de receptor en distintos campos relativos a la producción de moneda y a la organización de su trabajo de acuerdo a un pensamiento liberal, en consonancia con los nuevos tiempos y las necesidades de empresarios y comerciantes. Una reciente intervención arqueológica en 2014 obliga a interpretar los restos hallados en un rico contexto material e ideológico generado en la primera mitad del siglo XIX y la introducción de la Revolución Industrial en la casa de moneda de Barcelona a través de sus transformaciones en el campo de la producción de moneda.

145. EVANS, Jane DeRose, Temple University, Philadelphia, United States of America

What Archaeology Can Tell Us About the Date of the Opening of the Civic Mint in Sardis

A series of bronze coins, especially the Herakles/Apollo and Apollo/club series, came from the mint with only the legend “of the Sardians” on them. The date of the opening of the civic mint in Sardis has been vaguely pinned at “before 133 BC” and probably in 189 BC, i.e. by Head in the British Museum catalog or by Johnston in the publication of excavation coins from the 1950s to 1972, to “after 133 BC”. With my publication of the excavation coins from 1973-2013, I will re-examine the problem in light of new and old archaeological contexts. While there are not many Hellenistic strata isolated in the excavations that include both civic coins and pottery, I will place seven coins in the context of tombs, a ceramic dump, the theater fill and a residential fill to explore the pattern of loss and suggest possible dates for the striking. I will suggest technological, iconographical and metrological parallels for the coin series and propose an appropriate politico-historical moment for the striking. I will argue that the civic issues began ca. 240-220 BC and are struck through the 2nd and likely into the 1st century.

146. FABIANKOWITSCH, Anna, Kunsthistorisches Museum, Vienna, Austria

The medal production at the Viennese mint under the reign of Maria Theresia (1740–1780) (poster)

The medal production at the Viennese mint under the reign of Maria Theresia (1740–1780). About 300 types of medals from Maria Theresia’s reign are known today, many of which have not been catalogued according to scientific standards. To fill this research gap, an inventory catalogue of the medal collection of “Kunsthistorisches Museum Vienna” is currently being created. At the same time, historical backgrounds of the medal production during that period are going to be reflected: by reconstructing all of the production steps involved – from the medal’s commissioning, conceptual design, production to their respective function – its processes, practices and stakeholders are going to be analysed. Apart from these aspects, the participation of the court, the relevance of the medallists’ authorship, the reconstruction of the recipients and the medal’s media impact are essential research topics. Results of this project will not only affect numismatics, but will furthermore generate additional value for art history and historical science. For instance, questions about the specific medality of medals and their role within representation of rulers and culture can only be answered with an in depth knowledge of production conditions. The documented interconnectedness of commissioners and artists will enrich the art-historical interpretation of images. By reconstructing the medal’s group of recipients, possible social, political and diplomatic networks will be depicted, in order to examine its function as an object of donation. This poster intends to show the project’s sources, methods and research objectives to the numismatic research community.

147. FAUCHER, Thomas, CNRS / Université Orléans, France

Archive épistolaire inédite de G. Dattari

La vie de G. Dattari est associée aux débuts de la numismatique alexandrine. En collectionnant et en vendant des monnaies anciennes provenant de tout le pays, G. Dattari est devenu en l’espace de quelques années un personnage incontournable pour tous les numismates qui s’intéressaient à l’Egypte. C’est ce que nous montre un lot de lettres inédites adressées au savant italien. Cette archive épistolaire, maintenant conservée au CEAlex, fait apparaître les noms des plus grands savants de l’époque: E. Babelon, E.T. Newell, B.V. Head, H. Dressel... ainsi qu’une myriade de collectionneurs à l’affût des nouvelles trouvailles acquises par G. Dattari. Sur plus de vingt ans, ces lettres montrent comment «Giannino» a développé un carnet d’adresses international dont il devait s’enorgueillir, à juste titre, sans que le côté commercial n’apparaisse clairement. Cette archive est l’occasion de faire revivre la société numismatique du début du XXe siècle.

148. FEINGOLD, Ellen, Smithsonian Institution, Washington, United States of America

Curating the Smithsonian’s New Gallery of Numismatics

The new Gallery of Numismatics will open in the Smithsonian Institution’s National Museum of American History in July 2015. The gallery will showcase the depth and breadth of the National Numismatic Collection, which contains approximately 1.6 million objects from across the globe. It will link American monetary history to global histories of exchange, cultural interaction, and innovation. Thematically organized into five sections, visitors will explore the origins of money, new monetary technologies, the political and cultural messages money conveys, numismatic art and design, and the practice of collecting money. This talk will describe how the process of framing the gallery and selecting objects for display encouraged

the curator to revisit the history of the National Numismatic Collection and assess its distinct strengths, including the Josiah K. Lilly Jr. collection of gold, the Georgii Mikhailovich collection of Russian coins, the global Chase Manhattan Bank collection, the George B. Glover collection of East Asian coins, as well as the collections of the U.S. Mint, Bureau of Engraving and Printing, and Treasury. The inclusion of a section on new monetary technologies in the gallery also motivated the commencement of a new modern collecting plan aimed at acquiring 21st century cashless technologies and related objects, new national and regional currencies, and notes with updated security features. By providing the impetus for both revisiting the history the Collection and working to expand its modern holdings, the gallery project has inspired new research trajectories and highlighted opportunities for collaboration with individuals and institutions worldwide.

149. FENN, Nina, University of Cologne, Germany

The Roman Provincial Coinage of Achaea with representations of temples and their cult statues

The representations of temples and their cult statues on the Roman provincial coinage of Achaea forms part of my postdoctoral project “*The sacred topography of Greece in Roman times*”. The initial question is: Do the coin reverses reflect those Greek sanctuaries that were still important during the Roman period? Until now the reverse images on Greek coins of the Roman imperial time have been understood as illustrations of Pausanias’ descriptions or considered from an exclusively architectural point of view. Only a few gather the Roman coins of cities like Corinth or Argos posing historical questions. Even though in Greece it was less common to set temples on the reverses in comparison with e.g. Asia Minor, the material basis for a quantitative analysis is given. On this basis a general view will be presented on the coinage of the cities in Greece from Augustan to the Antonine period pursuing the question how the picture changes in the course of time. The diagram of coin types with temples show peculiarities, which demand a differentiated approach. Some cities with well-known sanctuaries do not refer to their temples despite a considerable emission (e.g. Athens) or coin just some selected temples frequently (e.g. Corinth). Most temples occur only on the coinage under one emperor; were they rebuilt/renovated under the emperor in question? Contrary the fewest temples were set on coins under several emperors; were those perceived as the town’s landmark? These questions have to be checked against the archaeological background and the epigraphic record.

150. FIKRLE, Marek, The Academy of Sciences of the Czech Republic

Czech early medieval dinars from the perspective of XRF analysis

The XRF analysis is one of the most often used method for evaluation of elemental composition of archaeological samples including coins. In the last six year we had analysed, in cooperation with Czech National Museum in Prague, approximately 1000 of early medieval dinars from different findings. It was e.g. well known Hradec Králové hoard, Kleč, Ostroměň etc. The next group of dinars was from so called Chaura's collection. XRF analyses gave us an information about quality of silver. In the historical context there could be uttered a few hypotheses about silver coins production during governmental crises in the reign of Přemysl dynasty.

151. FILIPPINI, Erica, Università di Bologna, Italy

Immaginare il Tempo: le rappresentazioni della “personificazione maschile con zodiaco” nella documentazione numismatica di epoca imperiale (poster)

Considerando la valenza simbolica espressa da *Aion* – personificazione del concetto di Tempo eterno e ciclico – nell’ambito dell’ideologia imperiale, il poster presentato in questa sede si propone di esaminare i tipi monetali pertinenti all’iconografia della figura maschile con zodiaco. Affermatasi, già a partire dall’età classica e poi in epoca ellenistica, come entità cosmica polisemica e polimorfa, la figura di *Aion* – intesa nella sua accezione peculiare di entità garante del rinnovamento dei tempi (*renovatio temporum*) in una dimensione di ciclicità eterna – assume in età imperiale una particolare connotazione politica, allusiva al ritorno dell’età dell’oro (*saeculum aureum*) nonché al rinnovo di un’epoca di prosperità e benessere universali (*temporum felicitas*), configurandosi dunque come personificazione strettamente connessa alla concezione stessa dell’*aeternitas* di Roma e dell’impero. In questo senso, la personificazione del Tempo eterno, rappresentata all’interno dell’anello zodiacale (attributo di accezione essenzialmente solare) e raffigurata alternativamente secondo gli schemi iconici della figura maschile seminuda stante o seduta, compare per la prima volta su *aurei* (e *denari*?) a legenda *SAEC(ulum)* *AVR(eum)* (variante iconografica del giovane stante, con fenice su globo nella s.) e sul rovescio anepigrafe di medaglioni in bronzo (variante con figura maschile seduta) battuti durante il principato di Adriano. Altre tipologie monetali – contraddistinte perlopiù dall’iconografia del giovane stante semidrappeggiato, con scettro nella s., raffigurato nell’atto di sostenere il cerchio

zodiacale attraversato dalle personificazioni delle Stagioni – risultano documentate, invece, da medaglioni emessi tra i principati di Antonino Pio e Probo.

152. FLAMENT, Christophe, University of Namur, Belgium

Le corpus monétaire argien: les monnaies du IV^e s. av. J.-C.

L'étude du monnayage argien menée en collaboration avec P. Marchetti a permis d'élaborer un classement détaillé du monnayage d'époque classique et hellénistique dont on présentera les principaux acquis. Il sera plus particulièrement question des émissions du IV^e s., les plus abondantes, massivement représentées (+ de 3000 exemplaires) dans le trésor de Mycènes (IGCH 171) dont nous préparons la publication. L'examen caractérisque de ces exemplaires a permis de reconstituer avec précision l'agencement relatif des différentes variétés de monnaies. La fréquence des liaisons de coins, en permettant de faire le départ entre les coins de droit utilisés concomitamment par plusieurs variétés et les coins résiduels faisant l'objet de réemplois, autorise, quant à elle, l'établissement d'une chronologie relative précise. De cette reconstitution découlent plusieurs enseignements. La densité des réseaux de liaisons de coins révèle que ce monnayage, bien qu'abondant, fut frappé durant un laps de temps restreint que l'on tentera de préciser, tandis que les marquages de ces monnaies ne peuvent en aucun cas correspondre à des signatures de «magistrats monétaires». À ce stade, l'hypothèse la plus vraisemblable est que certains éléments constitutifs de ces marques, plus particulièrement les lettres, devaient renvoyer à des unités de production; les symboles auraient servi, quant à eux, à distinguer les différentes phases de la production. On ne manquera pas alors de souligner les répercussions que sont susceptibles d'avoir ces nouvelles interprétations sur l'étude d'autres monnayages péloponnésiens.

153. FLUECK, Jonas Emmanuel, Switzerland

The augustean monetary circulation at Lugdunum on the basis of stratigraphical and statistical analyses

Between 2009 and 2013, we have been writing a PhD Thesis on the monetary circulation at the colony of Lugdunum (actual Lyons, France) from its foundation to the death of Septimius Severus (43 BC - AD 211) (University Lyon 2). With more than 1000 coins put back into their archaeological and stratigraphical contexts of discovery, this work gives a unique opportunity to follow the monetary circulation in a Roman colony over a period of two and a half centuries. After a brief presentation of the methodology used, we would like to present, on the basis of stratigraphical and statistical analyses, some interesting results regarding the monetary circulation at the end of the first century BC, the arrival of the Augustean coinage in circulation and the relations between the emissions of Nemausus and Lugdunum.

154. FLYNN, Henry, The British Museum, London, United Kingdom

The Museums, Money and Medals Network

The Money and Medals Network exists to build and develop relationships between UK museums with numismatic collections. Many UK museums face the problem of a lack of numismatic specialists on their staff and this project seeks to get people working together on a regional as well as national level in the interest of sharing knowledge and expertise. I am the Project Curator for the Network and I have been involved with mapping collections held within UK institutions. Practically every museum in the UK has coins, medals, tokens or banknotes in their collections and I have visited around sixty of them over the past year. The collections information I collect goes onto the Money and Medals website which acts as a national database of coin and medal collections. I have also been involved with setting up numismatic training days in key regions across the country and inviting anyone with an interest in the subject to attend sessions which focus on the identification, display and storage of numismatic material. These training days also feature discussions on how best to address the problems facing numismatics in those regions. I will be presenting an update on the work done so far and highlighting my efforts to set up regional numismatic networks, illustrated with several notable success stories.

155. FRANCISCO OLMOS de, José María, Universidad Complutense de Madrid, Spain

La influencia de la iconografía de la moneda castellana de los Reyes Católicos en sus descendientes (siglos XVI-XVII). Distintas lecturas para realidades políticas diferentes

La nueva iconografía de la moneda castellana de los Reyes Católicos (ambos monarcas sentados en el trono, bustos afrontados de ambos) quería reflejar visualmente la problemática situación política castellana y la relación de poder existente entre los Reyes, totalmente nueva, y distinta a la que se daba entre ellos en la Corona de Aragón. Con el paso del tiempo se produce la conquista de Nápoles (1504) y la aparición de un nuevo tipo monetario (el retrato de los monarcas, ocupando cada uno una cara de la moneda), reflejo de las ideas de los Reyes sobre el futuro de la Monarquía. Con estos antecedentes, veremos cómo sus descendientes utilizarán uno u otro de estos tipos para mostrar distintas realidades políticas y de cuotas de poder y legitimidad de acceso al mismo, tales como la relación de Juana y su hijo Carlos (piezas de Aragón y Cataluña), de María Tudor y Felipe II (Inglaterra), de Isabel Clara Eugenia y el Archiduque Alberto (Países Bajos), e incluso se hará referencia a otros espacios donde en esas mismas épocas se copiará este modelo con ciertas peculiaridades (Navarra, Béarn, Francia).

156. FREY-KUPPER, Suzanne, University of Warwick, United Kingdom - **RUTTER, N. Keith**, University of Edinburgh, United Kingdom - **MORCOM, John**, United States of America

Historia Numorum, Sicily and Adjacent Islands

This paper is dedicated to the forthcoming volume, *Sicily and Adjacent Islands*, of the third edition of *Historia Numorum*. Progress and achievements are outlined and the challenges of writing a monetary history based on a corpus of data assembled from collections, excavations and from trade are discussed, at a time when cumulative online databases are regarded as an easier and more pragmatic way to make data available to a wide audience.

157. FRIEDMAN, Daniel, School of Oriental and African Studies, United Kingdom

Free Coinage in Early Imperial China

Despite the Han dynasty's reputation for centralization, the first Han emperor actually revoked the monopoly on coinage established by his Qin predecessor. The violent chaos of the Qin-Han transition so depleted the supply of coinage that the early Han rulers felt they had no choice but to allow minting rights to all their subjects. This permissiveness resulted in the production of large numbers of thin, light, rough coins. After twenty years of "free coinage," the practice was banned. This ban, however, lasted only about ten years before the authorization was reinstated, along with new regulations about the appearance and weight of privately produced coins. Thirty years later, citizens were again deprived of their minting rights; aristocrats were similarly deprived thirty years after that. Throughout this period, the extreme reversals of imperial coinage policy reflected the debates among the highly placed scholar-officials that ran the Han court, who disagreed over whether a centralized or distributed system of production produces higher-quality currency: the monopolists argued that mints controlled by the government could be more efficiently regulated and would benefit from the most advanced casting technologies; their opponents countered that centralization would make corruption too attractive to government employees whose inevitable greed would result in debased coins. My project examines the social and economic significance of these early Han coinage revolutions, as well as their relationship to minting sites and technologies: how easy would it have been for ordinary people to produce coins themselves, and how would that ability have changed their lives?

158. FULINSKA, Agnieszka, Jagiellonian University, Poland

Napoleonic medals - in need of a modern publication (project presentation)

The subject of Napoleonic medals might seem one of the well documented areas of medallic production in modern Europe, but existing literature consists mainly of a number of 19th century catalogues with more or less accurate descriptions and often misleading chronological data, two 20th century albums of little academic value, and a set of three articles from 1990, based on reliable archive research, but covering only part of the problem. Moreover, some of the publications confuse official production of the *Monnaie des Médailles* in Paris with private initiatives, coins, jetons, and ephemeral emissions. The issue is further complicated by the existence of 19th and 20th century restrikes and production of commemorative medals and jetons during the Second Empire. All this led me to undertaking the project focused for now on the official, i.e. state inspired and supported, medallic production of the years 1799-1815, which I would like to introduce at the Congress. In my paper I intend to present the project of the monograph, which deals not only with the chronological clarifications and attributions to designers and engravers, but also with the iconographic programme and artistic value. I would like to outline the *status quaestionis* and ideas behind my research (the need to undertake the project, shortages of existing scholarship, characteristics of the material, catalogue compilation, published and unpublished archive resources, perspectives, etc.), and then show in detail some of the difficulties in dating and identifying iconographic details through the case study of one short series commemorating the Egyptian campaign.

159. GANDILA, Andrei, University of Alabama in Huntsville, United States of America

Byzantium and Lazica in the sixth century: the numismatic evidence

In Late Antiquity Transcaucasia acted as a buffer zone between Early Byzantium and Sassanian Persia and switched hands several times depending on the balance of power in the region. Lazian rulers were appointed by the Persian king, a practice which remained in place in the second half of the fifth century and until 522 when Lazica re-entered the Byzantine orbit. Justinian's legislation mentions several strongholds in Lazica, presumably under Byzantine control. These political developments find an excellent reflection in coin finds from this period. A significant number of Byzantine bronze coins have been found accidentally or during archaeological excavations in major settlements like Pityus, Sebastopolis and Archaeopolis. In addition, the concentration of ceremonial silver pieces in the region of modern Georgia is quite unique in the Byzantine world and points to intensive diplomatic efforts to create a dependable client state in Transcaucasia. Although Lazica was never included in the provincial system, Justinian's tendency to encroach upon the administrative and political structures of the tribes living in the southern foothills of the Caucasus made him extremely unpopular with the local princes. In a move typical of Transcaucasian politics, Lazica and its allies renounced their allegiance to Constantinople and reached out to the Persian king. Warfare in Transcaucasia, which lasted for nearly five decades in the sixth century, is clearly reflected in coin finds from the region. The large quantity of *solidi* and ceremonial *miliarenses* indicates political payments, bribes, and rewards for bravery, some of them mentioned in contemporary written sources.

160. GARBACZEWSKI, Witold, The National Museum in Poznan, Poland

Die sog. „Krönungs-“ und „Inaugurationsmünzen“ im mittelalterlichen Polen und Böhmen (bis zum Ende des 12. Jahrhunderts)

Unter frühmittelalterlichen in Mitteleuropa geprägten Münzen unterscheiden Numismatiker diejenigen, die – wie man vermutet – speziell am Anfang der Herrschaft (Inaugurationsmünzen) oder zur Krönung (Krönungsmünzen) geprägt wurden. Die charakteristische Ikonographie soll davon zeugen. Es geht hier um die Prägungen mit originellen Vorstellungen (und nicht bloß um Eintausch von Insignien), die nur zur Krönung oder Inauguration der Herrschaft geprägt wurden. Aber es ist sehr schwierig zu beweisen, dass solche Münzen überhaupt existiert haben. Im Vortrag werden die interessantesten Münzen kritisch beschrieben, deren Prägung mit der Regierungsinauguration und der Krönung der polnischen und böhmischen Herrscher bis zum Ende des 12. Jahrhunderts verbunden ist. Weiter komparatistischer Hintergrund lässt uns neue Hypothesen stellen. Das trägt zum besseren Erkenntnis der Münzen als Inhaltsträger im mittelalterlichen Mitteleuropa bei.

161. GARCÍA-BELLIDO, Maria-Paz, CSIC, Spain

The legend Permissu Augusti in the provincial Augustan and Tiberian coinage

The legend *Permissu Augusti* in Spanish and North African coinage has produced much literature for its exceptionality in the formulation and in the meaning. New proposals for both problems are offered on the basis of Spanish and African issues and on the study of literary sources referring to the subject

162. GARCIA SINNER, Alejandro, York University, United Kingdom - **PARDINI, Giacomo**, Università di Salerno, Italy

Analyzing the composition of blanks in northeastern Spain and the balearic islands during the 2nd c. BC

From the mid 20th century, a number of metallographic analyses of ancient bronze coins using X-ray Fluorescence have been published which have contributed to a better understanding of minting technologies used in the ancient world. However, most of the studies are problematic in a variety of ways: either the sample of the analyzed coins is too limited to get reliable conclusions –although they may be indicative– or when the sample size is big enough, the analysis is focused on one particular mint or coin issue. This means that comparative studies of certain technological aspects of ancient minting, such as the composition of blanks, are very rare. In addition, the reliability of such comparative studies is diminished as a result of the variability that occurs from using different equipment and operators. The aim of this paper is to present a study that analyzes and compares the composition of the bronze blanks used by the Punic mint of Ebusus and the Iberian mints of NE Spain (especially Ilduro, but also Aušesken, Laiešken and Lauro) during the 2nd c. BC using the X-ray Fluorescence method. A sample of almost 250 coins analyzed using the same equipment and operators ensure reliable comparison and lead to

interesting conclusions. In addition, the publication of a large corpus of data should become a reference point for future studies that employ this technology.

163. GARG, Sanjay, National Archives of India - **GARG, Nurussaba**, BBC, India

Counterfeiting of Coins in Medieval India: A Survey of Contemporary Literature

The history of counterfeiting of money is as old as that of money itself and this trade is often referred to as "the world's second oldest profession." India has a long history of money use, and it is, therefore, not surprising that this menace had seized the attention of the law-givers from very early times. The famous statesman and political commentator of ancient India, Vishnugupt Chankya (c. 370 – c. 283 BCE; better known as Kautilya), for example, devotes several chapters to counterfeiting of coins in his political treatise called Arthashastra (Economics). Counterfeiting of coins, together with other fraudulent practices such as clipping, drilling, and sweating of coins of precious metals, was rampant in medieval India – a period marked by the establishment of Muslim rule in several parts of India. Issuing of coins (*sikka*) was not only a royal prerogative and, therefore, a state monopoly, but it was also an important source of revenue. The rulers, therefore, took stringent measures against this nuisance. As there is a paucity of numismatic studies relating to this subject, this paper purports to present a coherent narrative based on the contemporary literary sources of medieval India, which would then be juxtaposed with the available numismatic specimens. References: Philip, Shastri J.C., *Shastri's Introduction to Indian Coin Forgeries*, 2nd edn., (2011) Sarma, S.R., *A Jain Assayer at the Sulṭān's Mint: Thakkura Pheru and his Dravyapariksa*, in Jayandra Soni (ed), *Jaina Studies: Proceedings of the DOT 2010 Panel in Marburg, Germany* (New Delhi, 2012) pp. 7-32.

164. GARGANO, Giorgia, Soprintendenza per i Beni Archeologici della Calabria, Italy

Problemi e spunti dai rinvenimenti di monete negli scavi archeologici a Vibo Valentia

Gli ultimi quarant'anni di attività archeologica nella città di Vibo Valentia (Calabria, Italia), la cui collocazione topografica parzialmente coincide con il sito dell'antica Hipponion - Valentia, hanno messo in luce e chiarito numerosi aspetti della città antica ma non sono stati ancora messi in relazione con i numerosi e significativi ritrovamenti di monete di età greca, romana e medievale. Il medagliere del Museo Nazionale Archeologico di Vibo Valentia, noto per l'ottocentesca collezione numismatica di Vito Capialbi, custodisce anche oltre mille reperti numismatici dagli scavi, dei quali verrà presentata una sintesi utile ad affrontare alcuni temi cruciali dell'archeologia ipponiate: il ruolo e la consistenza della moneta locale in relazione con la moneta straniera sia in età greca sia in età tardo-repubblicana; la presenza di oggetti paramonetali rinvenuti in alcuni contesti della città antica; la proporzione tra moneta greca, romana e medievale nei rinvenimenti; l'uso e la funzione della moneta nel quadro dei contesti archeologici; la relazione tra i rinvenimenti numismatici dalla città e quelli dalla *chora*.

165. GĂZDAC, Cristian, Institute of Archaeology and Art History, Cluj-Napoca, Romania

"War and Peace!". Patterns of hoarding in the Roman provinces from the Middle and Lower Danube

This paper is seeking to point out the general and specific patterns of hoards burial and non-recovery in peacetime and wartime by analyzing the distribution of coin hoards from the Middle and Lower Danube. In order to serve best the aim of this approach chronological segments were established according to major historical events that took place in the area under study. Combining mapping of hoards by periods with the information from ancient authors and the context of discovery this study will establish whether the hoards' burial reflects or not an impact of historical violent events on certain areas at certain time.

166. GĂZDAC ALFÖLDY, Ágnes, Transilvanian National History Museum, Cluj-Napoca, Romania

Coins in particular funerary contexts – case studies from roman Dacia

The function of coin in the society is not limited to the economic sphere of life; it is an active agent in the socio-cultural system of the period. The aesthetical value, the symbolic message and the social role of the coin pass through the filter of each individual receptor. Therefore, the analysis of coin as part of the archaeological context in which it was discovered opens a new perspective in the numismatic studies. In addition, monetary finds combined with other documentary sources, such as iconography (reliefs), epigraphy (inscriptions on stelae), expand the perspective to interpret coin from the socio-anthropological point of view. On the other hand, the interdisciplinary approach of the topic permits to reconstruct "small histories" in which a coin has been used. In Roman Dacia there are several funerary contexts (Ulpia Traiana Sarmizegetusa,

Drobeta, Romula) in which the coin can contribute not only to drafting some "stories" of each deceased person, but can help to the reconstruction of mentality in a certain period.

167. GEISER, Anne, Université de Lausanne / Musée monétaire cantonal, Switzerland

Courants monétaires celtes entre Alpes et Jura

Selon le modèle d'évolution des monnaies celtiques, les premières productions de la fin du IV^e siècle avant J.-C., issues de prototypes grecs, correspondent à de grandes zones métalliques d'argent et d'or. A la création de la Narbonnaise en 118, se forme une deuxième période d'émissions inspirées du denier romain, liant l'influence croissante de Rome aux besoins des Celtes. Selon ces principes, les trouvailles récentes en contexte archéologique permettent de distinguer quatre grandes phases monétaires successives en Suisse occidentale. - Une phase de monnaies d'argent et d'or, imitations de l'obole de Marseille et des statères de Philippe II de Macédoine, données aux «Séquanes-Helvètes». - A cette première phase succède au cours du II^e siècle, celle de potins et des quinaires d'argent d'inspiration romaine à la légende KALETEDOU. Les potins ont longtemps été attribués aux Séquanes et les quinaires aux Lingons, leurs voisins à l'époque de César. Les recherches récentes montrent que leur diffusion est ancienne et que leur production se situe des deux côtés de la frontière franco-suisse actuelle. La typologie des potins les différencie par zone géographique. Il s'agirait de pièces produites par plusieurs peuples, une sorte de «confédération monétaire». - Les troisième et quatrième phases sont constituées de pièces différentes: les quinaires au rameau et leurs dérivés. D'abord frappées en Allemagne méridionale, siège originel des Helvètes, de nouvelles séries de ces monnaies sont émises autour de 100 avant J.-C. sur le Plateau. Elles pourraient corroborer l'arrivée d'Helvètes, comme les Tigurins en Suisse occidentale.

168. GENEVIEVE, Vincent, Inrap, France

Nouvelle proposition de datation pour les premières émissions de bronze à légende latine de l'atelier d'Emporiae (Espagne).

La datation des premières frappes au Pégase et à légende latine de l'atelier d'Emporiae est toujours incertaine. L'examen des données archéologiques et numismatiques issues des fouilles de Toulouse et de Vieille-Toulouse permet de proposer un nouveau *terminus ante quem* fiable que l'on peut maintenant cerner autour de 10 av. J.-C.

168 bis. GENEVIEVE, Vincent, Inrap, France – **SARAH, Guillaume**, Cnrs, France

Une production inédite de monnaies coulées de Nîmes datée des années 70/90-110 ap. J.-C. sur le site de Barzan (Charente-Maritime, France)

Une série «d'imitations» coulées inspirée des types monétaires de l'atelier de Nîmes a été récemment mise en évidence sur les sites de Barzan (Charente-Maritime) et de Jau-Dignac-et-Loirac (Gironde) dans le Sud-Ouest de la France. Leur fabrication ne peut être contemporaine de celles émises à Nîmes sous le règne d'Auguste compte tenu de leur découverte dans des contextes exclusivement datés entre 70/90 et 110 AD! Les raisons d'une production aussi tardive restent obscures et encore à préciser tout comme le «statut» de ces monnaies que l'on peut difficilement interpréter comme des «imitations». Des analyses élémentaires de composition ont été réalisées sur plusieurs exemplaires pour tenter de répondre à une question majeure les concernant: sont-elles produites à partir d'un même stock de métal et en une seule fois? La quantité sans précédent - plus de 60 exemplaires - recueillie sur ces deux sites permettra aussi d'en localiser la fabrication avec une quasi certitude.

169. GEROTHANASIS, Dimitrios, Aristotle University of Thessaloniki, Greece

The Early Coinage of Kapsa Reconsidered

Ancient Kapsa (or Skapsa) was located in the west coast of the Chalkidike peninsula in northern Greece and is primarily known from epigraphic and literary sources. According to the numismatic literature, the city issued a small series of silver tetrobols on the Euboean standard during the first decades of the 5th century BC. The coins depict on the obverse, an ithyphallic ass marching right with a cylix above, and on the reverse, an incuse four-part mil sail with the letters KA in two triangles. The types adopted by the Kapsa mint are directly influenced from the contemporary coinage of Mende, the second most prolific mint in the area at the time to Akanthos. In fact, the only element that distinguishes the tetrobols of Kapsa from those of Mende is the inscription on the reverse. In the context of my PhD thesis on the coinage of ancient Mende, conducted at the Aristotle University of Thessaloniki, issues regarding the relation between the Kapsa and the Mende mints are

addressed. Why did Kapsa issue only tetrobols? Why did Kapsa adopt the coin iconography of Mende? On the basis of the die study of both coinages, it is argued that the early Kapsa tetrobols, in contrast with what was believed for more than a century, are in fact issues of Mende.

170. GHEY, Eleanor, The British Museum, London, United Kingdom

Coin hoarding in Iron Age and Roman Britain

A British Museum and Leicester University project is researching hoards from Iron Age and Roman Britain with a view to understanding the context in which they were deposited. A database of nearly 3000 hoards from Britain has been compiled, updating Robertson's corpus published in 2000 and including geographical and contextual information. This has been accompanied by examination of the landscape and archaeological context of the findspots of hoards, including geophysical survey of selected sites. Traditional interpretation of the reasons for the deposition coin hoards has varied, with ritual factors being given more weight in Iron Age assemblages but with social and political upheaval being favoured for the third century. Examination of the archaeological context of the hoards suggests a variety of possible motives for their deposition. There appears to be continued use of some Iron Age sites well into the Roman period and continuing traditions of multiple deposition of hoards in the same place. Improvements in the excavation and post-excavation treatment of coin hoards have shown that they were not always deposited in a single event. This paper will discuss the findings of the project so far and its implications for the study of coin hoards.

171. GIAMPICCOLO, Eleonora, Biblioteca Apostolica Vaticana, Italy

The coins of the Roman catacombs kept at Vatican Medagliere (poster)

The Medagliere of the Vatican Library has an important collection of coins which were found in the Roman catacombs. They are coins and medallions mostly dated to the third and fourth century which contributed to the enrichment of the remaining nucleus of the Medagliere after its plundering during the Napoleonic era. The poster focuses on this important collection.

172. GIANAZZA, Luca, Italy

Coin clipping and monetary crises: the case of the Italian "ducatone"

The decades from the 1580s to the 1600s must be considered as a period of economic stagnation for the North-Western Italy. The data coming from the documents and the coin finds highlight a situation of monetary shortage, rise of the price and increase of the overall course of the currencies. The governments did not understand the root causes of all this, and an efficient response to the crisis missed, leading to monetary imbalances. The monetary markets rapidly self-adapted, but this adaptation was traumatic: the production of the local mints dropped, the presence of foreign coins increased, and several currencies in circulation, such as the "*ducatone*" (a silver coin weighting more than 30 grams and one of the most relevant currency in the international exchanges), become unfit for the commercial needs. Coin clipping was one of the solutions that the market itself found to react. Through the analysis of hundreds of clipped *ducatoni* and a general reconsideration of the activity of the local mints, we can now prove how this operation was done systematically – despite not officially – by the market. Coin clipping was not necessarily a fraud: we find a clear intention to adapt an existing coin to the new economic environment, thus partially compensating the lack of brand new coins coming from the official mints. A turning point occurred only in the early 1610s, when new currencies, lighter than the "*ducatone*" and more responding to the changed economic conditions, came to light.

173. GIANAZZA, Luca, Italy

A collaborative inventory of coin finds (poster)

Despite several relevant publications on finds of Greek and Roman coins (e.g., *Inventory of Greek Coin Hoards, Ritrovamenti Monetali di Età Romana nel Veneto*), we still suffer the lack of similar works for the Medieval and Modern times. The collection of data is often managed individually, on very peculiar topics, feeding private archives rather than public repertories. Consequently, the data remain dispersed in several books and local journals, affecting negatively the study of the coin finds. A new web portal for the recording of data related to the coin finds, from the great hoard to the single find, is introduced here. The idea of the portal – open to the public and available at the following address: <http://www.sibrium.org/CoinFinds> – is to provide minimal information about the coin finds and the related bibliography,

without any pretention of completeness or homogeneity, based on a “wiki” approach. It consists in a free access area where anyone, after subscribing, can both enter new data and correct or integrate records already stored. Each coin find, or publication dealing with coin finds, is stored into an autonomous record, with a fixed record id, useful for future references. The portal includes specific sections dedicated to the management of the coin finds, the bibliography, search pages, and much more. The data stored in the portal can be exported in PDF reports, redistributable without restrictions. The extreme flexibility of the portal easily allows the import of data (via Microsoft Excel/Access, XML or CSV files) coming from other archives.

174. GIL CURADO, Tiago, Nova University of Lisbon, Portugal

Contact and Commerce between Portugal and United Kingdom during Medieval and Post-Medieval Period: Numismatic perspective

The aim of this paper is to identify and study all the evidences about Portuguese coins found in United Kingdom. 291 Portuguese coins dated between the 13th and the 18th century were recorded during the investigation. Portugal and England have the oldest alliance still valid in the world. This alliance, nowadays with 642 years, left some remains in the archaeological contexts of both countries. Coins are analysed in order to define which places in United Kingdom contacted directly or indirectly with Portugal. Where, when, how and why did it happen can be answered through these objects in order to clarify a bit more about the beginning of the globalization era.

175. GIMENO, Javier, Spain

Vt quiescat Atlas: un estado de la cuestión

La medalla de Gian Paolo Poggini dedicada a la abdicación de Carlos V en 1557 es bien conocida. En años recientes, diversos estudios puntuales, y en algunos aspectos divergentes, en el campo de la emblemática y otras materias, ofrecen datos interesantes para perfilar el origen de su iconografía. Se intenta presentar un estado de la cuestión y seguir la evolución de esta iconografía desde la elección de Carlos V como rey de romanos en 1519.

176. GIROD, Virginie, France

Mammae gratias ago: mères et fils dans le monnayage impérial des Julio-Claudiens

L’histoire des Julio-Claudiens n’est qu’une succession de coups d’État, réussis ou ratés, souvent menés par les membres même de cette famille. La légitimité de chaque nouvel empereur est un enjeu capital pour se maintenir au pouvoir. Dans un système social patriarcal qui considère que la femme n’a de place qu’au sein de son foyer, les monnaies impériales aux effigies des femmes de la *Domus Augusta* témoignent pourtant de leur importance dans la fondation et la continuité de la dynastie. Si les sources littéraires insistent sur le fait que tous les descendants d’Auguste peuvent prétendre à la pourpre, la numismatique démontre que seules les plus proches parentes du neveu de Jules César purent pousser leurs fils jusqu’à la plus haute marche du pouvoir. La monstration des mères d’empereurs dans le monnayage impérial est le corollaire de la quête de légitimité des principes. Dans la suite des recherches de M. Flory-Boudreau sur le titre d’*Augusta*, cette communication a pour but de montrer que les impératrices-mères étaient les pivots de la politique dynastique Julio-Claudienne.

177. GITLER, Haim, The Israel Museum / The Israel Numismatic Society – **TAL, Oren**, Tel Aviv University, Israel

A Preliminary Report on the Nablus 1968 Hoard of the 4th century BC

Two considerable hoards of Samarian coinage of the 4th century BC have been recorded so far. Ya’akov Meshorer and Shraga Qedar published the Samaria hoard in 1991 (CH 9.413) and Arnold Spaer and Silvia Hurter compiled information about the so-called Nablus 1968 Hoard (IGCH 1504 = CH 9.440), which included Athenian, Samarian, Tyrian, Sidonian and isolated coins of others mints. The latter hoard will be the main focus of our lecture. More or less than half the coins belonging to the Nablus 1968 Hoard as well as the jewelry, which was also part of this find, is currently on loan to the Israel Museum. In addition, the authors have received images as well as technical records of the remaining coins allegedly belonging to this hoard, based on inventory cards prepared by the late A. Spaer before part of the hoard was dispersed. We intend to present a preliminary report on the chronology and contents of this hoard based on the information we have been able to gather and to describe previously unrecorded Samarian coin-types.

178. GKANTZIOS DRAPELOVA, Pavla, National and Kapodistrian University of Athens, Greece

Eastern mints in the early Byzantine period (6th century AD)

The present paper represents an expanded version of talks given at conferences for postgraduate students in 2014 in Paris and in Oxford. In contrast to the presentations given in Paris and Oxford last year, this paper focuses on not only Antioch, but also on other provincial Byzantine cities in which the presence of active mints was recorded in the 6th century AD. This paper aims to present the distinct difference between the features of Eastern provincial coinage and that of Constantinople. Furthermore, to show that despite the fact that Byzantine coins are known for their uniformity, there existed important distinctions between the issues struck in the capital and coins struck in the Eastern parts of the empire. Some of the distinctive features may be related to specific historic periods and some others to culturally different environments and the author attempts to interpret some of the coins features within their historic and cultural contexts. There may be drawn historical parallels among the mints, for example between Nicomedia and Cyzicus, however some of the distinctive features have no parallels elsewhere, for example some features of Antiochene coinage. Some of the mints followed more faithfully the Constantinopolitan models and some less. The coins show that the eastern territories of the Byzantine empire were not homogenous. On the contrary, there were differences or there existed various tendencies in each region and each region could play a different role in economic policies of the Byzantine empire.

179. GONCHAROV, Eugeny, Institute Oriental Studies, Russian Federation

XII-XIII cc. Asia Minor's coins in Eastern Europe

Several dozens of such coins have been found but not yet properly studied. Most of them are a coinage of Seljuks of Rum, some also belong to other dynasties of Asia Minor, including Cilician Armenia and Georgia. The main points of those findings are Chersonese and Sudak in Crimea, Sharki archaeological area south of Kiev. Similar maxima denote the endpoints of the trade road between Black Sea ports and the Kiev Rus'. A small number of such coins have been unearthed in the area between western Ukraine, central Russia and middle Volga (Volga Bulgharia). The road from Transcaucasia to the steppe region passed through the site of Lower Julat (northern Ossetia), where the coins of pre-Mongol Georgia and the Eldigüzids were also found. I believe that these coin finds would have pointed to the events of trade activity of the Cherniy Klobuk tribe (otherwise Karakalpaks) or/and the Kumans.

180. GRANDJEAN, Catherine, Université François-Rabelais, Tours, France – **MOUSTAKA, Aliki**, Aristotle University of Thessaloniki, Greece

The Olympia Hoard (IGCH 270)

The Olympia Hoard (IGCH 270) has been found at the beginning of the Second World War in the Zeus sanctuary and never published. The paper will describe that important hoard and some historical and numismatic hypotheses will be presented.

181. GRIMALDI, Jonathan, Museo Archeologico Comunale di Frosinone, Italy

Il Medagliere del Museo Archeologico Comunale di Frosinone

Il Medagliere del Museo Archeologico Comunale di Frosinone, il primo istituito in Ciociaria, comprende oltre 500 monete, ed ha origini moderne: il primo insieme, costituito dagli esemplari della 'collezione Adolfo Brettagna', confluisce, infatti, nel 1993. Tale primo gruppo, a cui sono stati aggiunti i rinvenimenti numismatici provenienti dalle recenti campagne di scavo condotte nel territorio, è stato incrementato nel 2014 grazie all'acquisizione della 'collezione Vittorio Palermo': un corpus di 250 monete romane, soprattutto di epoca Imperiale. Dallo studio degli esemplari è nata la possibilità di realizzare una sala espositiva dove illustrare al pubblico tutti i beni numismatici. Il presente contributo intende analizzare il progetto scientifico dell'allestimento, al fine di mostrare le scelte comunicative adottate. In effetti, numerose sono state le sfide poste dalla realizzazione concreta dell'esposizione, sia da un punto di vista tecnico sia da una prospettiva scientifica, con l'intento di far interagire tutti gli aspetti tipici di un'esposizione permanente con quelli più innovativi. L'ideazione e quindi la progettazione dell'allestimento, curata dallo staff del Museo, si inseriscono in una dinamica di trasmissione di conoscenze ad un pubblico molto eterogeneo, composto sia da esperti del settore sia da un pubblico più vasto. In particolare, all'interno di quest'ultimo destinatario, si sono tenuti soprattutto in considerazione i bambini e gli adolescenti, i quali, potranno apprendere in un'ottica di

didattica ludico-creativa. Il Museo di Frosinone si colloca, quindi, tra le prime istituzioni italiane a dotarsi di un Medagliere con un apparato d'allestimento complesso ed innovativo sotto ogni aspetto.

182. GROSSMANNOVÁ, Dagmar, Moravian Museum, Czech Republic

Der Schatzfund von Zlechau /Zlechov/ (Tschechische Republik) und dessen Bedeutung für das Münzwesen im 13. Jahrhundert

Im Allgemeinen stellen die großen Münzendepots die vielbedeutenden Quellen für die Geldgeschichte dar. Die Gemeinde Zlechau befindet sich im südöstlichen Gebiet des Landes (Mähren). Der Schatz wurde hier in 1962 entdeckt und um die Wende der 50er und 60er Jahre des 13. Jahrhunderts datiert. Ein Zeitraum, in dem in Mähren sowie in Böhmen bereits der Brakteat geprägt wurde. Das Depot besteht überwiegend aus mährischen Münzen vom 13. Jahrhundert mit Anzahl von 1 560 Stück (Denare, kleine Brakteaten und Obolusse) und vervollständigt ist dieses durch einen Bestandteil von österreichischen Münzen mit Anzahl von 134 Stück (Pfennige). Bei den mährischen Münzen handelt es sich vornehmlich um die Prägungen von Ottokar II. Přemysl aus der Zeit seiner markgräflichen Regierung in Mähren von 1247 - 1253 sowie aus dem Zeitraum, wann er auch zum König von Böhmen erhoben wurde (1253 - 1278). Die österreichischen Pfennige stammen aus der ersten Hälfte des 13. Jahrhunderts. Durch den Schatz von Zlechau wird die Typologie der mährischen Münzen bedeutend vervollständigt, indem diese die sehr wertvollen Typen von mährischen Prägungen enthält, die nur in wenigen Stücken gerade aus diesem Fund bekannt sind, und dieser stellt ebenfalls eine wichtige Quelle zur Festlegung der Chronologie der einzelnen Münzentypen dar.

183. GROZANOVA, Lily, Bulgaria

The development of Pautalia (province of Thracia) during the 2nd – 3rd century AD viewed through the city coinage

The numismatic evidence presents an interesting, very tangible base for exploring historical phenomena. The coins preserve information addressed to and perceived directly by the masses that used these means of exchange. One could try to find indications for the reasoning behind every depiction on the coin dies. The coin types attest economic, political and social specifics. Some of them reflect specific topographic elements, enriching the knowledge even for buildings and fortifications. Pautalia had a very active mint from the first half of 2nd century AD till the beginning of the 3rd century AD. During this period the issues of the city present an additional angle for analysis. Its geographical location in the border zone between the provinces of Thrace, Macedonia and even close to Moesia Superior, near important itineraries and the variety of natural resources made it an important economic and political center of the region. Despite this, data for the history of the city are almost missing in the narratives. Even the inscriptions are not so informative as one would expect. Thus the numismatic evidence becomes a key source of information. The coin depictions provide a chance to reconstruct specific details about the different aspects of the city's development. Nevertheless equally intriguing is the determination which layers of the historical construct could be approached and retrieved through the numismatic materials.

184. GRUEL, Katherine, AOROC, UMR 8546, CNRS-ENS, France - **NIETO-PELLETIER, Sylvia**, IRAMAT-CEB, UMR 5060, CNRS / Université d'Orléans, France

Existe-t-il un système monétaire armoricain basé sur le billon à la fin de l'indépendance gauloise?

L'Armorique du Ier s. a. C. est caractérisée par la présence de nombreux trésors de monnaies armoricaines très homogènes et pour lesquels de nombreuses liaisons de coins sont attestées. Ces dépôts, contenant en moyenne un millier de pièces, parfois beaucoup plus comme les trésors de Jersey qui dépassent les 20000 monnaies, sont identifiés comme des encaisses militaires, liées à la guerre des Gaules; les monnaies ont peu circulé et ont même été probablement prélevées pour une part dès la sortie de l'atelier. Plusieurs de ces trésors, particulièrement Trébry et Amanlis, ont fait l'objet d'études assez exhaustives incluant liaisons des coins, volumes d'émissions et analyses métalliques. Ces résultats offrent une bonne vision des compositions des séries monétaires de billon coriosolites et vénètes. En revanche, aucune analyse n'avait jusqu'à présent pu être faite sur les monnaies riedones. L'étude du trésor de Liffre nous fournit l'opportunité de compléter nos connaissances sur ce peuple et plus généralement sur les cités armoricaines qui ont émis des billons. Les trésors de Trébry et d'Amanlis ont été analysés dans les années 1980 par activation neutronique, celui de Liffre, récemment, par activation aux neutrons rapides de cyclotron. On mesurera donc, également, la validité de la comparaison de nos résultats obtenus avec des méthodes différentes. Les billons vénètes et coriosolites présentent des similitudes de titre. On s'interrogera alors sur l'existence pour ces billons armoricains d'un système monétaire spécifique, avec poids et aloi comparables, mis en place à la fin de l'indépendance gauloise.

185. GULLBEKK, Svein H, Museum of Cultural History, University of Oslo, Norway

Religion and Money - Where archaeology meets Salvation: Medieval Money-offerings

Money-offerings became universal within medieval Western Christendom. Christian doctrine emphasised the importance of money-offerings: gifts given on earth had eternal effects. Ecclesiastical architecture, art and liturgy formed the physical and habitual framework in which parishioners approached altars, saints shrines and money-boxes with their money-offerings. Analysing archaeological finds from Scandinavian churches provide an in-depth access to people's perceptions and use of money in relation to religion. The coin finds enable us to investigate religious devotion and the role of money in medieval people's search for eternal salvation. In medieval Europe coins became a universal token in the economy of salvation. In this economy it was not necessarily the size of the offering that mattered. In millions of cases every year petty cash was trusted as a material mediator between Man and God.

186. GUNAY, Hale, Ipek University, Turkey

The Roman Monetary Economy in Bithynia during the second half of the first century BC: The case of Nicomedia

Located at the heart of Turkey's industrial region today, eastern Marmara region also had a significant economic role during the Roman Period. This region is bequeathed to Rome in c. 75-74 BC and it becomes a new province. The first regular governor known in the province of Bithynia is C. Papirius Carbo who exclusively issues bronze coins in the Bithynian cities: Amastris, Amisus, Apameia, Bithynium, Nicaea, Nicomedia, Prusias ad Olympium, and Tium. Based on the number of coins which survived, it can be said that the largest number of coins seems to have been minted in Nicomedia. Moreover, these coins are exclusively dated to the last year of Carbo's office, which is 59-58 BC. The aim of this study is to define the scale of the coins issued by Carbo in Nicomedia in 59-58 BC, and to reveal the operation of coinage during this period. The main questions addressed in this paper are: a) why did Carbo issue bronze coins? b) was the coinage voluminous? and c) how did the monetary economy operate e.g. the currency for high-value transactions, in Bithynia during the second half of the first century BC? A die study of bronze coins involving Carbo's emissions in Nicomedia was done in order to answer the question of how many dies were used, and therefore how many coins were produced. As a result, this study contributes to the current knowledge of the Roman monetary economy in Bithynia during the second half of the first century BC.

187. GÜNTHER, Sven, University of Bielefeld, Germany

Authority or just Reference? Approachings of Classical Antiquity in Russian Medals of the 18th Century

Insights into coined media of Russia in the 18th century shed light on the different ways in which the Classical Antiquity has been approached and dealt with in legend and image. The Russian medal production from Tsar Peter I the Great to Tsar Catherine II the Great shows a clear reception of symbols and texts from the Roman Empire with an emphasis on the Augustan era. Yet, it also documents a transition from a style that is still committed to Classical themes towards new forms of manifestation of the Classical Antiquity. This will be analyzed in the paper, e.g. the media fight of Peter I the Great in the Great Northern War with Sweden or the stabilization programs under Elizabeth I and Catherine II the Great after the leadership crises at the beginning of their rule; but also the proposed transition away from a style that is still committed to Classical themes towards new forms of manifestation of the Classical Antiquity will be questioned. Literature: S. Günther, *Between Imperium and Libertas: Understanding, Utilization and Diversity of Interpretation of Roman Power and Moral Concepts in European Medals and Seals of the 18th Century*, in: *Le Siècle des Lumières IV: L'Héritage de l'Antiquité dans la culture européenne du XVIIIe siècle*, Moskau 2012, 181-198.

188. GURULEVA, Vera, The State Hermitage Museum, St. Petersburg, Russian Federation

Syracuse follis of Leo V in Cherson

The peculiarity of the monetary circulation in Cherson at the beginning of IX century, just before the re-operation of the local mint, is the abundance of Syracuse *follis* of the classes 1 – 3 of Leo V. These coins are hundreds of instances while the *follis* of Constantinople mint are units. There are four classes of Leo V's *follis* struck in Syracuse. The first three classes were similar typologically and technically. The fourth one is different. Ph. Grierson supposed the coins of the class 4 should be carried to Leo IV with Constantine VI. The absence of proof for the new attribution made him to refrain from the conclusions. However, the evidence of the coin finds in Chersonese confirms earlier attribution, because there is no *follis* of the class 4 among numerous coins of the classes 1-3. Another important feature of circulation of Syracuse *follis* in Cherson is the fact that most

of them were heavily cut down: 50% of the coins weight between 0,48 – 2 g. Evidently the coins were cut down in Cherson for their reduction to the local weight system. Irina Sokolova (paper for the INC of 1961) suggested the Sicilian coins appeared in Cherson due to the connections of the admires of the icon exiled both to Sicily and the Crimea. This opinion is controversial.

189. GUSAR, Karla, University of Zadar, Croatia - **ŠUĆUR, Jure**, University of Zadar, Croatia

Numismatic finds from archaeological site Pakoštane – Crkvina, Croatia

Archaeological site of Pakoštane – Crkvina is situated at the west coast of the Vrana Lake, in the vicinity of Croatian coastal town Zadar. Site has been excavated by the Department of Archaeology of the University of Zadar from 2006 till 2014. Remnants of medieval sacral complex comprising of church of St. Mary with lateral rooms, cemetery and fence wall were discovered. Among numerous other finds, coins are very indicative for the life span of the site that was abandoned after Venetian-Turkish Wars. Coins found so far are covering wide chronological range from the 4th to 19th century with majority that can be dated from the 13th to 16th century. Origins and types of coins are various – Byzantine gold coins, coins minted in different Italian cities (Padova, Aquileia, Pisa) and Venetian Republic, Hungarian, Bavarian pfennigs and Austro-Hungarian kreutzers. Among regular coins there are also some forgeries. This numismatic material represents a reflection of historical and commercial activities of the wider Mediterranean region, including the city of Zadar and its wider surrounding which comprises the site of Pakoštane – Crkvina as its inseparable part.

190. GUZZETTA, Giuseppe, Università di Catania, Italy - **VICARI SOTTOSANTI, Maria Agata**, Università di Catania, Italy

Osservazioni sulle monete di imitazione del "tesoro dei sei imperatori" dalla baia di Camarina

Negli anni Novanta del secolo scorso sono stati recuperati sul fondale sabbioso della baia dell'antica città greca di Camarina un complesso di quasi 4500 monete della seconda metà del III secolo, ormai noto in bibliografia come "tesoro dei sei imperatori", e insieme con esso parecchi utensili di bordo di vario genere. Il complesso è costituito da antoniniani prodotti negli anni fra il 263 e il 282 per la maggior parte nei territori settentrionali delle odierne Francia e Germania, regioni dell'allora *Imperium Galliarum*. In queste furono conati tanto i pochi esemplari delle due zecche ufficiali, Treviri e Colonia, quanto l'enorme massa, oltre il 90 per cento del complesso, di radiati di zecche illegittime. A seguito della recente edizione di tutti i materiali, gli autori approfondiscono il loro esame delle monete di imitazione al fine di accertare l'esistenza di legami di conio interni ed esterni al complesso e analogie iconografiche con le imitazioni di altri complessi finora editi.

191. HADJI- MANEVA, Maja, Museum of the National Bank of the Republic of Macedonia

Coin Circulation in the Province Macedonia Salutaris and the neighboring areas

The Late Roman coins found in Stobi, the capital of the Roman province *Macedonia Salutaris*, are the starting point of the research in this paper. The analysis of these coins in comparison with a study of the coin finds in the neighboring areas offers a more general picture on the coin circulation during the 4th and 5th centuries. Administrative assignation and geographic proximity of the mints had certainly affected the coin distribution, especially of the bronze and silver coinages. As with a regard to the high denominations, primarily the gold coins issued either in the Western or the Eastern mints, most often they diverge from this pattern, and their distribution is probably related with the presence of high military or administrative officials. The paper will include graphs on the annual frequency of the coins in circulation, aimed at reaching conclusions on the oscillatory movements throughout the 4th century as well as on the lower-scale distribution in the 5th century.

192. HAHN, Wolfgang, University of Vienna, Austria

The sequence of issues struck by the mint of Rome from Emperor Leo III to Pope Hadrian I

The latest issues struck in the names of Byzantine emperors by the mint of Rome belonging to the reigns of Leo III to Leo IV (717-80) reveal the dying of the multi-denomination system on which for centuries the fiscal administration had relied. The fading-out of the traditional small copper and silver coins cannot be exactly terminated because they do not carry a dating by years but it was a consequence of the deteriorating gold content in the *solidi* and the *tremisses* the greater part of which do show such dates. Though it has not been clearly shown hitherto indiction years were meant throughout and this allows to

follow the typological and metrological development of the erstwhile solid gold denominations more closely. Apparently their alloy was partly influenced by the metal availability, but copper prevailed from c.760 and minting became sporadic. The final issue is to be dated into the reign of Leo IV in 777/8 and the first new *denarii* of Pope Hadrian I in 788/9; it seems that both can be connected with specific occasions.

193. HAIDENTHALLER, Ylva, Uppsala University, Sweden

Producing the Pole Star – Early modern Swedish medals

In the 17th century, especially after the Thirty Years War, Sweden was occupied with demonstrating and presenting itself as the new great power it had become. Particularly the visual culture was a fine way to express the royal desires and ambitions. And what better way to show Sweden's new age of greatness than through medals, the baroque business card. The progressively psychological concepts of the early modern medals inform and shape as they modulate expressions and gestures with both richer and more refined meanings. Analysis of the compound personifications of the royal court produced in this era call for a careful and observant deciphering of their attributes and an awareness of how these medals could produce highly pliable and varied meanings. Paradoxical, through pictures the message becomes more apparent and complicated at the same time. The hoax is to understand the images' function in relationship with the commissioning body and his situation and personal taste, as well as the medals' general significance as cultural psychological object. This paper aims to illustrate the Swedish court's official iconography through medals, and the reception of the same.

194. HEDLUND, Ragnar, Uppsala University, Sweden

The return of the Art Cabinet: the ancient coins at Uppsala university and the Alvin-database

Coin collections are usually regarded as intended mainly for specialists in numismatics. It has not always been so: until at least the 19th century, coins were part of larger collections, reflecting broad interests in the arts and humanities. Coins had their places in the microcosmos of the 17th century Art Cabinet, as in the collections of the rich and noble in the 18th century. Now, in the digital age, the connections between coins and other objects can be re-created virtually. Uppsala University Coin Cabinet is launching a project, aiming at making its collection of ancient coins accessible digitally. The coins will be made accessible in the Alvin-database, which is handled by Uppsala University Library. This is a major database constructed to contain any kind of objects or archives belonging to the university, including coins. The integration of numismatic data into the Alvin-database means that the coins will become available online, far beyond the ordinary outreach of a coin cabinet since Alvin is meant to serve as a general data platform for archives, libraries and museums. We will also be able to visualize the pre-modern mode of collecting in the database. Moreover, this ensures long-term handling and storage of project information. In this paper, I will present the Alvin-database project and address how numismatic databases can not only make more material available to scholars, but also re-integrate numismatics as a discipline in its scholarly context.

195. HILBERG, Volker, Archäologisches Landesmuseum Schloss Gottorf, Germany – **LEHMANN, Robert**, University of Hannover, Germany - **MERKEL, Stephen**, Bergbaumuseum Bochum, Germany

The monetary exchange between Vikings and their southern neighbors reflected by metal analysis (poster)

The Vikings are noted for having imported vast amounts of silver from the Orient to Eastern and Northern Europe. It has been assumed that central European silver sources did not play any significant role for Viking coinage and the coinage of their proximate neighbors, since enough silver has been imported from the Orient by trade. Latest studies on the silver origin of hundreds of coins from Viking and related areas show that central European silver sources had a significant influence. Thus, unexpectedly many Viking coins show a provenance from central European ore deposits. On the other hand, the imported oriental silver is often found in heavy silver jewellery or as cut silver. Apparently, European silver was predominantly used for coinage, especially in the Danish-German area. These results were obtained by analysis of just under 200 coins and silver artifacts by semi-nondestructive laser ablation mass spectrometry (fs-LA-ICP-MCMS).

196. HIRIART, Eneko, Université Bordeaux Montaigne, France

Pour une classification raisonnée des monnaies à la croix

De l'aveu même d'A. Blanchet, les monnaies à la croix constituent l'ensemble monétaire le plus complexe et le plus difficile à classer de Gaule. Par la suite, ce constat a été relayé par de nombreux auteurs. L'étude de ce monnayage – très abondant en Gaule méridionale – est fondamentale pour la compréhension des dynamiques économiques et ethniques. La classification est un intermédiaire fondamental à la recherche. Elle doit proposer un système cohérent qui permette de déchiffrer la complexité d'un monnayage, afin d'appréhender son évolution, ses dynamismes et ses particularismes. Les classifications existantes ne semblent pas remplir pas ces conditions et accusent un manque d'évolutivité. Leur manque de souplesse conduit à des incohérences qui entravent l'utilisation, le traitement des données et la compréhension des monnaies à la croix. À travers ce nouveau catalogue des monnaies à la croix, nous souhaitons créer un outil de travail simple à utiliser, mais aussi structuré et hiérarchisé. La typologie devra établir des régularités dans cet ensemble monétaire et isoler des séries cohérentes. L'objectif étant de saisir les traits qui se rapportent aux structures socioculturelles étudiées. Cette démarche se fonde sur une complémentarité d'approche inductive et déductive. Toute méthode incluant une part d'empirisme, la pertinence de ce système sera justifiée par une analyse consciencieuse (incluant des analyses statistiques). Le système proposé se veut évolutif et facile d'utilisateur. Deuxièmement, il s'avère fondamental de définir les critères iconographiques déterminants du droit et du revers suivant leur valeur sémantique (symbolisme, fonction, particularisme...).

197. HOBBS, Richard, The British Museum, London, United Kingdom

Silver plate as elite currency in the late Roman Empire

It has long been recognised that silver plate in the form of *largitio* was a key component of the late Roman system of payments and gifts used to maintain and nurture relations among the elite ranks of Roman society. This paper argues that this idea should be taken one step further: silver plate can be viewed as a direct continuation of late Roman currency and silver plate and coins should be considered as one single denominational system. Thus items of silver plate were manufactured, beginning with half pound silver bowls, when it was no longer practical to strike large denominations of silver coin with sets of dies. After the half pound bowls came larger bowls, then plates and platters, with the largest platters known weighing 50 Roman pounds: these are the largest 'denomination' of 'coin'. Further, numismatic studies have focussed on the production of coinage at a series of mints across the Empire – this paper argues that silver plate was produced alongside the coins and the links between silver plate production and coinage should be more actively researched. For example, the vessels themselves appear to resemble large coins: the introduction of beaded rims, which were also struck using sets of dies, mimic the pellet borders around the edges of high value coins such as the silver *miliarensis*. Finally, this paper considers what happened when the system collapsed: coins were clipped and silver vessels hacked into pieces, which can be directly equated with the collapse of the late Roman elite.

198. HOCKENHULL, Thomas, The British Museum, London, United Kingdom

"Stamped all over the king's head": defaced British pennies and the campaign for women's suffrage

"This suffragette coin stands for all those who fought for the right to vote", wrote Neil MacGregor in his 2010 book *A History of the World in 100 Objects*. The subject was an ordinary 1903 British penny stamped in crude lettering with the slogan "VOTES FOR WOMEN". The first part of this paper examines aspects of the material culture of the suffragette movement in Britain and, in particular, the way in which circulating currency was defaced as an act of political protest. Direct comparisons will be drawn between the suffragette defaced penny and other messages stamped on coins, such as "Pears Soap" advertisements and satirical messages on coins of Queen Victoria. By contextualising the coin within the eighteenth and nineteenth century tradition of defacing coins, partly for political subversion but also for the purposes of advertising, this paper will explore its potential effectiveness as a form of mass persuasion. An inadvertent result of recent publicity about the object is the creation of a market for spurious imitations. The second part of this paper aims to assess the publicity that the defaced penny has received, and its potential impact on our knowledge of the material culture of the suffragette movement.

199. HOFF, Corinna, Germany

Lycian Tiarate Heads Reconsidered

From the late 6th century BC onward the Lycians forming an ethnos with its own language and script inhabiting the Teke peninsula in south-western Asia Minor were members of the Achaemenid empire, possibly with a short interruption during the mid 5th century BC, when the Lycians paid tribute to the Delian League. The Lycians began minting coins probably as early as the 6th century BC. During the 2nd half of the 5th century BC some Lycian dynasts started minting coins with tiarate heads similar to those of the Persian satraps. The interpretation of both – the Lycian and the satrapal tiarate head coins – has been

much debated mostly on the basis of numismatic and written evidence. As far as the latter are concerned, mostly Greek sources have been discussed despite growing knowledge and comprehension of the Lycian language. A careful reinvestigation of the sources including indigenous Lycian inscriptions as well as other media of self-representation such as the tomb reliefs of the Lycian dynasts minting coins with tiarate heads will help to clarify identity and function of the tiarate heads on the Lycian coins.

200. HOGE, Robert, American Numismatic Society, New York, United States of America

The Dispersion and Denouement of the Archer Milton Huntington Collection

The enormous A. M. Huntington collection of coins relating to the entire history of the Iberian peninsula and its peoples, the property of the Hispanic Society of America, was probably the foremost such group ever assembled. It was sold in a single lot, sealed-bid auction by Sotheby's, in New York. Although significant portions had never been thoroughly studied or catalogued, the collection remains an extremely important resource for continuing research. This paper will address the general content of the Huntington collection and its value, discuss examples of its subsequent cataloguing and inventorying, and review the acquisition of major significant portions by dedicated institutions and their benefactors.

201. HOLLSTEIN, Wilhelm, Staatliche Kunstsammlungen Dresden, Germany

Zum Prägeort des Sicinius/Coponius- Denars (RRC 444)

Im Jahr 49, als der Bürgerkrieg zwischen Caesar und Pompeius ausbrach, gaben Q. Sicinius als Münzmeister und C. Coponius als Prätor, beide Anhänger des Pompeius, gemeinschaftlich den Denar RRC 444 aus. Wenn auch seine grobe Datierung feststeht, so ist doch der Prägeort nicht gesichert. In jüngerer Vergangenheit wurde unter Hinweis auf das Rückseitenbild „Löwenfell über Keule“, das sich auch auf Kistophorenteilstücken mehrerer kleinasiatischer Städte findet, sowie auf das Kommando der rhodischen Flotte durch Coponius die Zuweisung in den westkleinasiatischen Bereich als weitgehend gesichert betrachtet. So sollen die Münzen aus den dort vorgenommenen Geldeintreibungen des Pompeius geprägt worden sein. Dieser Lokalisierung widersprechen zwei wichtige Interpretationskriterien. Die Auswertung der Münzfunde und die unregelmäßige Stempelstellung des Sicinius/Coponius-Denars belegen eine Prägung in Italien. Damit ist es möglich, den Typ RRC 444 zeitlich weiter einzugrenzen und ihn vor dem Übersetzen der Pompeianer nach Illyrien im März 49 einzuordnen. Gefragt wird nicht nur nach dem genauen Prägeort, sondern auch nach dem Anlass der Prägung sowie nach der Bedeutung der Münzbilder.

202. HOSTEIN, Antony, University Paris 1 Panthéon-Sorbonne, France – **MAIRAT, Jérôme**, Ashmolean Museum, Oxford, United Kingdom

Some New Lights on the 3rd c. Crisis in the Propontis: the coins of Parium, from Gallus to Gallienus

Πάριον, modern Kemer, ancient greek city of Troas, became a Roman colony probably under Augustus. The city changed its name for *Colonia Gemella Iulia Hadriana Pariana* as shown by inscriptions published by Peter Frisch (*Die Inschriften von Parion* (=IK 25), Bonn, 1983). During the Principate, the city grew and flourished thanks to its key commercial position on the Propontis. Parium produced coinage throughout the imperial period, from the emperor Augustus until the sole reign of Gallienus (AD 260/8). The last issues of the mid Third century, although abundant, have been neglected by numismatists, due to a lack of a comprehensive corpus. The work achieved for volume 9 of *Roman Provincial Coinage* (Decius to Aemilianus, AD 249-53) now provides us the full picture of the emissions minted during an era of total warfare. This paper will present a comprehensive catalogue of the coinages minted in Parium between AD 253 and 268. A special attention will be paid on the local emissions and reverse designs, compared to those of the nearby roman colony of Alexandria Troas. Last, the barbarous imitations of bronze coins of Parium and Alexandria will be analysed in the light of the Gothic invasion of AD 258.

203. HOURMOUZIADIS, Jean, Münzkabinett Berlin, Germany

Non-Destructive Assessment of Material Content of Bronze Coins

The patination process releases copper to the environment so that the content on the surface is reduced to about half the original value. Tin and lead concentrations increase three to four times from the initial content. X-ray Fluorescence Analysis (XRF) gives a quite accurate evaluation of material concentrations but does not penetrate into the core of the coin. It gives

results for the patina layer only. Measurement of the electrical conductivity penetrates well into the specimen but does not give any direct data of the Material content. The method presented combines and correlates the two techniques to assess the concentrations of copper, tin and lead in the core. The multidimensional correlation is developed using a free available neural network from the web with a single hidden layer of neurons. Heavily worn specimens from Maroneia, Thrace, Philip III of Macedonia and Roman provincial coins are used for the development and validation of the Method. The characteristics are measured on both sides with the two techniques, the patina on one side is than mechanically removed and the measurements repeated. With the resulting correlation the original copper, tin and lead content of the coin can be assessed with an accuracy better than 4% without damaging the specimen. The method is described in detail and the problems encountered discussed. The evaluation of a collection of coins of Teres III of Thrace is presented.

204. HRISTOVSKA, Katerina, Museum of the National Bank of the Republic of Macedonia

On a Rare Billon Trachy of Theodore II Ducas-Laskaris of Nicaea

In 2003 the Numismatic Museum of the National Bank of the Republic of Macedonia acquired a rare 13th century billon trachy, which Michael Hendy in his *Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection* of 1999 had attributed to John III Ducas Vatatzes as a Type Q, determining it as a Magnesians issue minted sometime during the reign of John III, between 1221 and 1254. This curious coin type was known to him only by a single specimen in possession of the Archaeological Museum in Athens. On the basis of the examination of the second known specimen, kept in the Archaeological Museum of Sofia, in his article published in 2008, in *Numismatika, sfragistika i epigrafika*, Vladimir Penchev attempted to reattribute this rare coin to the mint of Thessalonika, suggesting that it was an issue of the Thessalonikan Emperor Theodore Comnenus-Ducas. The latest specimen from the Numismatic Museum of the National Bank of the Republic of Macedonia readdresses the discussion on its attribution, clearly suggesting that it was an issue of his son Theodore II Ducas-Laskaris, minted during his short reign from 1254 to 1258.

205. HUBER, Katharina, Austria

The Circulation of Roman Republican Coinage in the Imperial Period (poster)

On my poster, I am going to present my PhD-project dealing with the circulation of Roman Republican coinage in the imperial period, c. 30 BC to AD 300 (University of Vienna, Austria; PhD-supervisor: Bernhard Woytek, Austrian Academy of Sciences). I am investigating the circulation patterns of Roman Republican coinage from the reign of Augustus onwards, with a special focus on the silver *denarii*. I want to find out more about the influence of imperial coinage reforms on the circulation of Republican *denarii*, and the reasons for the disappearance from circulation of the majority of pre-imperial *denarii* during the reigns of Trajan and Hadrian. My study is based on a comparative analysis of the structure of a large number of silver coin hoards from the Roman Empire, with a particular emphasis on the *limes* regions, especially in Central Europe. The hoard data is gathered in cooperation with the *Coin Hoards of the Roman Empire Project (CHRE)*- a collaborative enterprise affiliated to the *Oxford Roman Economy Project (OXREP)*, co-directed by Chris Howgego and Andrew Wilson (University of Oxford), and carried out together with numerous international project partners, e.g. the Austrian Academy of Sciences. The information contained in these hoards is crucial for the study of the Roman economy and will add to our understanding of the mechanisms of coin supply, coin circulation and the use of Republican coins in the imperial period. Preliminary results of the analytical study of the circulation patterns of Roman Republican *denarii* will be presented on my poster.

206. HÜRLIMANN, Florian, Switzerland

Fundmünzen aus Ingelheim am Rhein

Seit den späten 1880er-Jahren finden in Ingelheim, am Mittelrhein gelegen, archäologische Untersuchungen statt, seit 1993 unter der Leitung von Holger Grewe, der den Fokus nicht nur auf die Pfalzanlage selbst, sondern auch auf die Umgebung - das "Weichbild" mit Pfostenhäusern, Grubenhütten und Grubenverfüllungen - legt. Ausgrabungen an der 741 erstmals genannten Kirche St. Remigius ergänzen dieses Bild. Die Bedeutung des karolingischen Kronguts ließ Ingelheim in die Reihe der Königspfalzen aufsteigen. Baumaßnahmen seit der Wende vom 8. zum 9. Jahrhundert sind archäologisch und quellenmäßig gesichert. Ingelheims Geschichte ist in den folgenden Jahrhunderten von einschneidenden Wechseln zwischen Bedeutungsverlust und -zunahme geprägt: Nach massiver Bedeutungsabnahme kann die Zeit der Ottonen und frühen Salier als erneute Glanzepoche angesehen werden. Von der Ära der Staufer zeugt die Erweiterungszone. In der Ingelheimer Geschichte war 1354 auch die Gründung des Karl-Stiftes im Pfalzgebiet durch Karl IV. einschneidend, das dem Heilgenkult Karls des Großen diente. Durch die Forschungen kam ein Spektrum an Münzen zutage, welches das Bild des Geldumlaufs um Mainz

ergänzt: Die nachrömische Fundmünzreihe beginnt mit zwei Sceattas (porcupine-Typen) des 8. Jahrhunderts, wird durch karolingische Stücke fortgesetzt - darunter auch die Aufsehen erregende Goldmünze mit dem Bildnis Karls des Großen - und schließt mit "Petermännchen" sowie (pfälzischen) Kreuzerstücken.

207. IACULLI, Ughetta, Università di Roma "La Sapienza", Italy

Aspetti della monetazione provinciale: atletismo e identità civica

Le province orientali battono moneta non mantenendo sempre le tipologie canoniche di derivazione romana. Le personificazioni sul rovescio, varie e ricche di significato, sono assunte dalla zecca centrale, modificando dettagli e mettendo la legenda in caratteri latini. Esistono emissioni (cistofori) che si diversificano completamente, zecche che si aprono in occasione di cerimonie e battono moneta per identificarsi e diversificarsi dal contesto regionale. Il linguaggio è un importante indicatore di identità, di appartenenza. L'iconografia delle monete può essere un indicatore della 'romanizzazione' ma questi fenomeni invitano a riflettere sul controllo effettivo delle coniazioni provinciali: non tutte le città raffigurano l'imperatore al dritto, la titolatura imperiale varia notevolmente, le legende presentano indicazioni etniche, a testimonianza dell'identità civica della comunità. Nelle province grecofone la vitalità delle emissioni testimonia aspetti dell'integrazione nell'Impero, della percezione dell'autorità politica romana, della persistenza di istituzioni ellenistiche, del riemergere di culti locali, dell'atletismo con competizioni e cerimonie che diventando occasione per rivendicare la *παίδεια*. Le indicazioni di tempo e le rappresentazioni dello spazio sulle monete possono essere un marcatore dell'identità. I monumenti sulle monete ricordano il patrimonio culturale, alludono al mito o alla storia, alla tradizione. Le città dell'Asia Minore che battevano moneta come "capitali" dei regni ellenistici, continuano coniazioni nei tre metalli, mantengono i pesi e la tipologia precedente. Le monete sono state descritte come forma deliberata di identità pubblica. Un *medium* che invita a riflettere non tanto sulla questione di fino a che punto le identità pubbliche sono intese come segreta 'resistenza' a Roma, quanto in quale misura possono essere 'ispirate', promosse da Roma stessa.

208. ILKIĆ, Mato, University of Zadar, Croatia - **ČELHAR, Martina**, University of Zadar, Croatia

South-Liburnian pre-imperial numismatic finds from southern Italy and Sicily

Approximately 1500 various numismatic finds dated to the last three centuries BC have recently been found in southern Liburnia (nowadays northern Dalmatia in the Republic of Croatia). There of 75 mainly bronze coins belong to the area of southern Italy and Sicily. Arpi, Luceria, Salapia and Teate are represented from the region Apulia. They are followed by the coinage of the Italic tribe Bruttii in Calabria, and the cities of Brundisium, Graxa and Tarentum. Aside from the coinage of the city of Laurinum from the territory of the Frentani, coins of Laos, Metapont and Velia in Lucania are also represented. Coinage from Sicily has been found as well, and that from Syracuse, mainly minted for the reign of Hieron II (274-216 BC). All of the mentioned numismatic finds have not been published. They originate from the archaeological hillfort sites: Asseria (Podgrade), Bribir, Cvijina gradina (Kruševo), Čosina gradina (Jagodnja gornja), Gradina (Kaštel Žegarski), Gradac (Smokvica), Ljubljana (Ljubač), Gradina Sv. Trojica (Starigrad), Rađučka glavica (Kistanje), Trojan (Stabanj), Velika gradina (Obrovac) and Vir. Briefly presented numismatic finds are important for better understanding of trade contacts between opposite coasts of the Adriatic, especially southern Liburnia with southern Italy and Sicily.

209. IVANOVA, Hristina, Winckelmann Institute for Classical Archaeology, Berlin, Germany

A retrospect of Apollo in the coinage of Apollonia Pontike (poster)

The study concentrates on the coinage of the *polis* Apollonia Pontike, situated on the southwest coast of the Black sea. It issued coins discontinuously since the beginning of the 5th c. BC until the Severian Period. Its official *parasemon* was the anchor, usually accompanied by an "A" and a lobster, in diverse combinations. The coinage of Apollonia reflects the city's religious identity throughout the entire period of its issuing, including in the Roman era. The *polis* started as a Milesian *apoikia* and as such it bears the name of Apollo. The worship of this deity was highly spread in the Milesian foundations in the Black Sea area. This major and interconnecting for the region cult inspired a key theme occurring in Apollonia's monetary system. The occurrence of the deity can be even connected with the early arrow or dolphin money. The image of Apollo himself can be observed on the Apollonian coin series since the 4th c. BC. It dominates as a motif until the end of the minting activity of the *polis*. Especially interesting is, that in the late Classical period the presence of magistrate's names is attested almost explicitly in combination with Apollo designs. That is just one of the intriguing research topics concerning the numismatic materials from Apollonia Pontike.

210. JAMBU, Jérôme, Université de Lille / CNRS, France

Évaluer la circulation monétaire en Flandres ou comment justifier l'ouverture de la Monnaie de Lille (1685)

Dès le début de l'année 1685, le Conseil du roi et le Contrôle général des finances enquêtent dans les territoires nouvellement conquis par Louis XIV au nord du royaume (Flandres, Hainaut, Cambrésis...) afin de connaître l'état de la circulation monétaire. Une telle entreprise avait déjà été menée en Flandre wallonne entre 1670 et 1672, après sa conquête lors de la guerre de Dévolution (1667-1668); le pouvoir avait alors pour projet d'ouvrir un atelier monétaire à Tournai afin d'y transformer aux coins du roi les pièces espagnoles et surtout néerlandaises qui y circulaient (cf. JAMBU 2014). Mais la guerre de Hollande qui suivit (1672-1678) mit fin à l'entreprise. Quelques années après la paix, la monarchie souhaite à nouveau remédier à la situation, tolérant peu que seul le numéraire de ses ennemis, réputé de piètre qualité, circule dans ces provinces et que par des frontières perméables s'échappent ses propres espèces. Avant d'ouvrir une Monnaie, toujours couteuse, et de définir la nature du monnayage à y délivrer, le contrôleur général des finances Le Peletier et ses agents sont chargés de dresser un tableau de la réalité de la circulation monétaire dans le nord. Une abondante correspondance, des enquêtes et mémoires inédits, tirés du Contrôle général et conservés aux Archives Nationales, nous permettent de la cerner avec une rare précision à la veille de l'ouverture d'un atelier monétaire, finalement établi à Lille.

211. JANKOWSKI, Lyce, Oxford University / Ashmolean Museum, United Kingdom

Para-numismatics - Do all the coin related items deserve to be kept in a coin room?

Should a coin imitation be kept in a coin collection? Can we dispose of empty coin boxes? These are the questions that I had to answer when beginning to work for the Heberden coin room in the Ashmolean museum, Oxford. I had to deal with a number of artefacts that were much less valuable and much less highly regarded than coins but still coin-related: ancient coin boxes, imitations of coins, old teaching or exhibiting panels, rubbings, photographs, calligraphied tickets... Some of these para-numismatic objects are written documents and could therefore be transferred to archives. It is usually agreed to keep in the coin store some documents, coin tickets for instance, next to the coin they relate to. However, there is no common policy concerning the various types of documents, such as rubbings or coin catalogues. As a consequence, usage varies a lot from one institution to another. How can we fix the limit between the documents or objects that need to be kept with the coins and those that do not? This paper will explore this issue through the study of three objects kept in the Heberden Coin room: an ingot imitation made for exhibition, a lacquered box for coin storing, and a coin catalogue.

212. JARRETT, Jonathan, Barber Institute of Fine Arts, Birmingham, United Kingdom

A Problem of Concavity: the original purpose of the so-called 'scyphate' Byzantine coinage

One of the odder things about later Byzantine coinage for the novice observer is that much of it is saucer-shaped. A trend that began with the debased gold *nomisma* in the late eleventh century spread to electrum, billon and bronze after the reform of Alexius Comnenus in 1092. This change of manufacture has been much studied and it is clear that it must have complicated coin production considerably, but its original purpose remains unclear. Explanations based on ready visibility of precious metal content, strength of flans or even stackability all falter when confronted with sufficient actual coins of these types, which were rapidly debased without reverting to the flat pattern, which are often cracked at their thin edges, and which do not, in point of fact, stack at all well. This paper proposes an alternative explanation in which the difficulty of manufacture is made central, by linking the appearance of the 'scyphate' coins to the first imitations of Byzantine coinage in the Bulgarian kingdom. I suggest that the new design of the *nomisma* was meant to function as a kind of 'copy protection' for the Byzantine state's prestige coinage by making its manufacture too difficult and expensive for its new rival to imitate.

213. JÄRVINEN, Outi, The National Museum of Finland

Medallic art of Emil Wikström. A source study

The history of medallic art in Finland is short as there was no tradition of engraving when the first medals modelled by Finnish artists were issued in the late 19th century. Even the teaching of sculpture was not at a professional level at that time. Artists specialising in sculpture had to seek further education abroad. This was the case also in medallic art. It may be the reason for the lack of evidence on how this delicate form of art was adopted in Finland. One of the main figures in the field of medallic art was Emil Wikström (1864–1942), the best-known sculptor of his time in Finland. He studied both in Vienna and Paris in

the 1880s, and accomplished his first medal in 1896 showing evident expertise in this art form. Published research has not so far cast any light on how he got acquainted with medallion art, or where from he derived his influence. If there is any evidence to be found on this subject, it is not made visible. It has already turned out that the personal archives of Emil Wikström reveal very little, but there is still the collection of his letters unexamined from the medallion point of view. This paper is, if not an attempt to create a whole picture, but at least to put together some missing pieces of this puzzle.

214. JELLONEK, Szymon, Jagiellonian University, Poland

Dynastic propaganda of Caligula- imperial patterns and provincial answers

System of coinage established by Augustus was continued by his descendants. Gaius Caligula, as a first truly Julio-Claudian emperor tried to imitate his great-grandfather. The evidence of his attempt is imperial coinage, which contains motives used by his predecessor. Ancestors of emperor were presented on coins: Augustus (RIC 1), Germanicus (RIC 25) and Agrippina the Elder (RIC 14). All of his siblings were also placed on imperial coins. Drusus and Nero Ceasars were shown as the *Dioscuri* (RIC 34), and his sisters: Agrippina the Younger, Julia Livilla and Julia Drusilla were presented as *Securitas*, *Fortuna* and *Concordia* (RIC 33). On the other hand we have provincial coinage, which was much more autonomous, but still members of Julio-Claudian appeared. On coins of Apamea mother and siblings of Caligula are presented (RPC I 2012-2015). Antonia the Younger, grandmother of emperor is presented on the coin from Tethalonika (RPC I 1573), his father Germanicus is shown on the *as* of Corinth (RPC I 1178). These are a few examples of diverse provincial production of coins during Caligula's principate. The main question that comes sounds, what were the relations between imperial patterns and provincial answers. The poster is presenting examples of imperial and provincial coins containing members of Julio-Claudian Dynasty struck under Caligula and the analysis of the influence imperial motives on provincial coins.

215. JIMÉNEZ MARTÍNEZ, Francisco, Spain

El botón contemporáneo: fantasía e imitación del antiguo sistema monetario romano (only in the Proceedings)

El botón es un objeto funcional y decorativo que permite utilizar su superficie como un excelente medio de comunicación. Un espacio que nos ofrece un sinnúmero de manifestaciones artísticas y que en ocasiones ha imitado el diseño y contenido de monedas de curso legal. Del mismo modo son los fabricantes de botones, atraídos por los antiguos sistemas monetarios griego y romano, quienes materializan esa influencia en sus productos, siendo el numerario romano uno de los más reproducidos.

216. JONSSON, Kenneth, Stockholm Numismatic Institute, Sweden

The earliest coinage on Gotland and in the Baltic countries

The start of the coinage on Gotland has often been dated to c. 1140 based on a coin in the 1967 Burge hoard on Gotland. However, this coin is without doubt better regarded as a Frisian prototype for the coinage, the start of which should then be dated to c. 1150 based on the Bårarp hoard in Halland. This earliest Gotlandic type had a nominal value of 1 penning and was struck until the early 13th century. It was followed by a series of types with a common reverse struck until 1288. The issuing authority behind this coinage was probably a common body for the island (Alltinget). However, in 1288 the coinage was taken over by the city of Visby. The city now struck a penning and in c. 1340 the örtug/gote was introduced. Both continued to be struck without change of motifs until c. 1450. There are a number of types with the same size as the Gotlandic pennings, but with lower weights and often struck as bracteates. These types must be regarded as coins struck c. 1190-1225 in the Baltic countries. The later types can be connected to a document from 1211, which granted the Gotlandic merchants in Riga the right to strike coins.

217. JOUVET, Ludovic, Institut National d'Histoire de l'Art, Paris, France

Les médailles des vice-rois de Naples au XVIIe siècle

Représentant du roi d'Espagne sur ces terres italiennes, le vice-roi de Naples a une position qui l'oblige à mobiliser un appareil de représentation du pouvoir particulier. Substitué du d'un roi lointain le vice-roi doit néanmoins en exposer toute la majesté. Membre de la plus haute aristocratie espagnole les vice-rois doivent tenir leur rang et vivre noblement: la médaille est un *medium* qui leur assure cette double fonction. Objets éminemment politiques et objets de prestige les médailles sont aussi le symbole de l'intégration du pouvoir espagnol à la culture italienne et de manière plus large, l'intégration des vice-rois à la

koinè de l'aristocratie européenne. Elle est aussi la marque d'une pratique de pouvoir: ne pas imposer une manière espagnole trop visible. L'étude de l'iconographie de ses médailles permettra d'en mesurer les écarts par rapport à la production contemporaine de la péninsule italienne et la proximité avec les modèles romains et napolitains. Nous nous poserons également la question du choix des artistes pour la réalisation des médailles: Leone Leoni médailleur et bronzier de Charles Quint servira de prologue à la question. Enfin nous proposons de rendre compte de la réception de ces médailles par les contemporains.

218. JOYAUX François, Société de Numismatique Asiatique, Nantes, France

La fin du monnayage annamite sous le règne de Bao Dai (1926-1945)

Durant toute la période coloniale française en Indochine, l'Empire d'Annam conserva son droit d'émettre ses monnaies traditionnelles. Dès l'avènement de Bao Dai, eut lieu une émission de sapèques de valeur 6 (1926): il s'agissait plus d'une "monnaie d'avènement" que d'une monnaie à vocation commerciale. Une seconde eut lieu en 1932, de valeur 10, pour le début du règne effectif de Bao Dai. Ce fut la dernière émission traditionnelle de l'Annam. Peut-être est-ce à cette occasion que R. Mercier, graveur de la future sapèque frappée de 1933, effectua des essais de fonte avec des moules obtenus de sapèques de Duy Tân (1907-16). Ces essais s'avèrent probablement décevants. Il fallut donc frapper mécaniquement, en 1933, de nouvelles sapèques, gravées par R. Mercier, selon un procédé totalement original. Parallèlement, la fonte de lingots d'or et d'argent était définitivement abandonnée. Quant aux monnaies de présentation en argent et en or, elles perdaient leurs fonctions traditionnelles et devenaient de simples décorations. Des métaux nouveaux étaient utilisés: bronze doré, vermeil. Certaines n'étaient plus fabriquées en Annam, mais en Europe. L'iconographie dégénérait et perdait toute signification. La légende "*baò giam*" (monnaie précieuse) se substituait à "*thong bao*" (monnaie courante), ce qui impliquait une fonction très différente. Enfin, de véritables décorations faisaient leur apparition, sur le modèle français, ce qui vidait les monnaies de présentation de leur usage traditionnel. Une ordonnance du 24.8.1941 mettait un point final à cette évolution en transformant définitivement les monnaies de présentation en médailles. Le monnayage de l'Annam traditionnel avait vécu.

219. KARLSSON, Yngve, Gunnar Holst Numismatic Foundation, Göteborg, Sweden

Sasanian Silver Coins

Sasanian numismatics is interesting in many ways, but the subject is very hard for most people to deal with. In a collaboration between the coin cabinets in Berlin, Paris and Vienna the Sasanian numismatic history is explored. The results from the research are published in a series of books called *Sylloge Nummorum Sasanidarum* (SNS). The SNS has already become the new reference for collectors of Sasanian coins. The first two Sasanian rulers Ardashir I and Shapur I worked hard to break with their Arsacid (or Parthian) predecessors. Through the Zoroastrian priest Sasan, they claimed ancestry all the way back to the last Achaemenid kings. A restoration of the old Zoroastrian religion is another ingredient in the formula of transformation. The holy fire on the altar became canonical on Sasanian coins. The coinage changed in several other ways too. The portraits on Sasanian coins faced right instead of left and the flans got wider and thinner, with the weight still kept at about 4 g. A typical Parthian coin had a diameter of 19 mm and the first Sasanian drachms had a diameter of 27 mm. The diameters continued to increase and during the reign of Khusro II, we find coins that are up to 35 mm wide. The stamped area of the coins often covers as little as 50-60% of the total area of the flan, so there was a lot of high quality silver for anyone to steal from the king. However, almost all Sasanian coins are undamaged.

220. KATZ, Rebecca, Harvard University, United States of America

Muttonis Mutunus: Q. Titius and the Case of the Obverse Head (RRC 341/1)

In this paper I defend the controversial identification of the Roman Republican moneyer Q. Titius (Crawford 341) as Q. Titius Mutto and the male head depicted on the obverse of his *denarius* (341/1) as the phallic god Priapus or Mutunus Tutunus, which would constitute a visual allusion to the moneyer's *cognomen*. The unusual appearance of the obverse head, which is shown wearing a winged diadem and with a pointed beard, is emphasized by the appearance of the same pointed beard on the Janus head shown on the moneyer's bronze issues. Its identification is corroborated by comparison with strikingly similar depictions of Priapus on several bronze issues of Lampsacus struck between the second century BCE and the first century CE, some of which also have Pegasus as a reverse type, just as 341/1. The identifications of the moneyer's *cognomen* as Mutto, first proposed — independent of numismatic context — by C. Cichorius (*Untersuchungen zu Lucilius*, Berlin 1908, 206–208), and the obverse head as that of Priapus or Mutunus Tutunus are further strengthened by the resulting onomastic allusion, which was a common phenomenon in Roman Republican coinage. Over one hundred such allusions have been proposed in

Republican coinage alone, and this example deserves to be recognized as part of that tradition. *Pace* Crawford, there are convincing grounds for regarding the moneyer as a Mutto and the male head on the obverse of 341/1 as an allusion to that *cognomen*.

221. KELEŞ, Vedat, Ondokuz Mayıs Üniversitesi, Turkey - **OYARÇIN, Kasım**, Atatürk University, Turkey - **YILMAZ, Michael Deniz**, Ondokuz Mayıs University, Turkey

Roman colonization of Parion in light of coins

Evaluation of colonization coins in Parion revealed in terms of iconography and legend, Parion was colonized twice by Rome during the reigns of Iulius Caesar or Augustus and Hadrianus. In the first colonization process during the reign of Iulius Caesar or Augustus, it was aimed to provide land in Parion for veterans of legions, and in the second colonization process during the reign of Hadrianus, it was aimed to honour the city by granting it the status of a colony. The figures on the coins of Parion are compatible with general Roman Empire colonization policies and show the significance The Empire gave to Parion as a colony. The five different figures on the backside of the coins are related to the colonization of the town and each one of them is significant as far as the Roman colonization policies are concerned. In the article, Roman colonization of Parion will be set forth in light of coins from Parion.

222. KELLEHER, Richard, Fitzwilliam Museum, University of Cambridge, United Kingdom

The Monetisation of Medieval England (c.1150-1400): New Interpretations from Single Finds

Coins are a vital source of evidence for many aspects of the medieval past. This paper will summarise the results of a research project which used more than 18,000 provenanced coin records, collected and published online, to analyse patterns of monetization and coin use in medieval England and Wales 1150-1400. The results demonstrate a long and complex story of coin use and monetisation over the study period and add a new angle to how we understand the growth and contraction of coin use. The denominational profile (which contrasts with hoard evidence) hints at the diversification of the coin user base and suggests new ways in which coins were used.

223. KEMMERS, Fleur, Goethe University, Frankfurt am Main, Germany

Contact, connectivity and conflict: Coin production and use in the Hellenistic West Mediterranean

The Hellenistic period in the west Mediterranean is characterized by increasing and escalating conflicts between an expanding Rome, local groups, Greek *poleis* and the Punic world. Simultaneously, coin production and use increasingly takes place outside the major centres of Magna Graecia, thus developing into a tool for a wide range of cultural groups. How can the production and use of coins in this period be understood against such a background? This paper addresses this topic by combining on the one hand evidence from hoards and coin finds from selected sites across the West-Mediterranean, and on the other hand the numismatic data on production periods, denominations and types. Through the hoards it seems we can grasp networks of circulating wealth, which are disrupted by changing power relations. By looking at production periods and denominations we can see how interconnected various monetary systems were. Site finds allow a glimpse into the daily practices of various groups, and how these developed under the influence of changing power relations. In this way we hope to demonstrate how the various cultural groups, who became increasingly connected, responded differently – at least numismatically speaking – to the changing world. Especially the Roman conquest seems to have triggered very different trajectories.

224. KIUDSOO, Mauri, Tallinn University, Estonia - **LEIMUS, Ivar**, Estonian History Museum, Estonia

Topography of Viking Age coin hoards in Estonia, reconsidered

The Baltic region is considered to be one of the richest areas in Viking-Age Europe. In terms of the density of hoards, Gotland clearly stands in the first position here but numerous deposits also have been uncovered in other lands, incl. Estonia. More than 100 coin hoards of 10-12th c. from Estonia were known until 1990-2000s. Since then, “thanks” mostly to the spreading of metal-detecting the number of finds has increased remarkably (up to c. 40%) which causes need for their new topography. A topography provides first-hand information about settlement centers, trade contacts and traffic routes. First the hoards from c. 800–1000/1050 are found only in the areas near the coast. Then, they spread up to Central Estonia where the emergence of

Tartu as an important economic centre was is to be pointed out. Famous trade routes connecting the Baltic with lands of Rus', Byzantium and Islamic lands passed through the Gulf of Finland on one hand and through Lakes Peipus on another. The second half of the eleventh century (starting c. 1060) was the richest period in terms of coin finds in prehistoric Estonia, due to the growing interest from the West and changes of the political, social and economical situation *in loco*. In contrast to the hoards from the Viking Age, which mainly were found in the coastal areas, the post-1060 hoards are discovered from almost everywhere. Then, in the early 12th c. the hoarding area started to shrink towards the coastal area again.

225. KLEEBERG, John, United States of America

The Forgeries of Western and Mexican Gold Bars by John J. Ford and Paul G. Franklin

In the 1950s and the 1960s false gold bars, ostensibly dating from the nineteenth century U.S. West and colonial Mexico, were manufactured in the New York City suburb of Massapequa. The makers of these bars were John J. Ford, Jr., and Paul G. Franklin. The sales of these bars furnished Ford with the funds to put together a numismatic collection that later sold for \$56 million, which makes him the most successful forger in history. Some of the Ford-Franklin forgeries were openly condemned by Eric P. Newman in 1967; the Mexican gold bars were condemned by T. V. Buttrey at the International Numismatic Congress in 1973, and the Western gold bars in Buttrey's ANS Huntington lecture in 1996. Despite these forthright condemnations, the forgeries continued to be traded and sold and even were exhibited at the Smithsonian Institution. A general acceptance that the pieces were indeed forgeries did not emerge until the second decade of the twenty-first century. The paper will discuss how we know that these items are forgeries, how we know who did it, how we know that they purposefully carried out the fraud, and why it took the U.S. numismatic world half a century to acknowledge the truth.

226. KOCZWARA, Paulina, Jagiellonian University, Poland

Finds of the cisalpine drachms and other Celtic coins in the Central and South Italy

Imitations of Massalia drachms are one of the oldest coins issued by Celts. From the area of Po valley comes relatively high amount of finds of Greek (mostly issued in Sicily and South Italy) and roman coins. In contrary, finds of cisalpine or other Celtic coins in the area of Latium and Magna Graecia are very rare. In the area of Latium only two finds of Celtic coins were recorded: hoard from Capitoline Hill and big hoard (ca. 500 drachms) from Falerii Novi. For finds on area occupied by Greeks, there are recorded specimens of various Celtic coins in Pompeii and Cosenza. Several finds were discovered also in Greek cities in Sicily: Butera, Gela, Lipari and Ietas. Chronology of these finds are dated (mostly thanks to presence of Greek and Roman coins) between III - I century BC. Finds contain mainly issues of Boii-Cenomani, Libici and Vindelici. The Celts had strong economic relations with Greek cities, as well as with Roman Republic, though it is not reflected in numismatic evidence outside the area of Celtic settlement. Relatively small amount of finds of Celtic coins in Latium and South Italy may be a result of an inner circulation of local issues among the Celtic tribes or can we evidence of hegemonic nature of those relations. However it can be also testimony for rather subsidiary character of Celtic issues.

227. KÖKER, Hüseyin, Harran University, Turkey

Coin Finds from Aizanoi

During excavations at Aizanoi in 2011-2013 seasons a total of 157 coins were recovered from the sectors of around the Zeus temple, gymnasium-bath complex, theatre, necropolis and surface. The coins covered the date from 3rd century BC to AD 20th century; 4 Greek (1 Macedonia, 1 Philadelphia, 1 Aizanoi (Epiktetos), 1 unidentified), 26 Roman Provincial (11 Aizanoi, 1 Aizanoi or Kolossai, 1 Bageis, 2 Hypaipa, 11 unidentified), 2 Roman Republic, 62 Roman Imperial, 10 Byzantine, 51 Islamic and 2 Ottoman Empire.

228. KONUK, Koray, CNRS, Université Bordeaux-Montaigne, France

Historia Numorum Online: Caria

This new project initiated in 2015 is based at the Ausonius Institute (Bordeaux Montaigne University) and aims to offer an online version of the *Historia Numorum* project which goes back almost half a century ago when Sir Edward Robinson decided to work on an up-to-date version of Barclay Head's *Historia Numorum*, the last edition being published in 1911. It was subsequently decided that authoritative volumes would be arranged regionally and the first to appear in 2011 was devoted

to Italy under the principal editorship of Professor Keith Rutter. A second volume on Sicily is announced. The online version of *HN* will initially cover Caria and it is expected to include some 6000 pre-Roman coins arranged by type, assembled from major national and private collections as well as published *corpora* and auction catalogues.

229. KOOL, Robert, Israel Antiquities Authority, Jerusalem, Israel

Money and Coinage at Arsura Rural Township and Castle, 11th-13th centuries in the Latin East

For the past twenty-two years excavations at Apollonia-Arsur have laid bare in elaborate detail the multi-layered history of the site. Particular impressive are the finds related to the Crusader occupation (1101 - 1265). Extraordinary rich finds, of a wide range of objects allow us to piece together in minute detail the rich material culture and economic realities of a coastal township and its castle in the kingdom of Jerusalem during its more than 160 years existence. Combined evidence of written sources and archaeological remains, such as pottery and above all coinage allows us an intimate view of the economic realities of a small Frankish township as it emerged from a Fatimid period settlement till its destruction by the Mamluk sultan Baybars' armies in April 1265.

230. KOPIJ, Kamil, Jagiellonian University, Poland

Coin Propaganda and Communication – a Case of Roman Coinage

In this paper, I would like to examine propaganda value of Roman coins. First of all, I will explain why I believe that familiarity with modern theory of propaganda may be use in classical studies, particularly in the study of coins (which are sometimes the sole traces of propaganda campaigns). An awareness of the varying definitions of propaganda may help to determine which phenomena can and cannot be labelled as propaganda. At the same time knowledge of different types of propaganda could help us to categorise the cases we encounter and allow us to label them in the correct manner. Secondly, I will like to present certain communication models (the Shannon–Weaver model, Lasswell's model, Schramm's model, Eco's Semiotic Model, etc.) that I believe may be helpful in the study of coin propaganda. The main contribution to this field would be that they could enable us to ask the right questions pertaining to propaganda and the way it is transmitted. Finally, I will focus on the conceptual framework of how to study propaganda proposed by Jowett and O'Donnell. This is made up of several key questions that every scholar must attempt to answer if they wish to study propaganda successfully. In addition, I will make some critical remarks concerning the adaptation of this framework to the study of ancient coin propaganda.

231. KOUREMPANAS, Theodoros, Hellenic Numismatic Society, Greece

The bronze coinage of the roman quaestors of Macedonia

The coinages of the roman quaestors of Macedonia are dated either after the creation of the province by H. Gaebler or twenty years earlier after the battle of Pydna in 168 B.C. by P. Mackay. More recently M. Crawford in his study of the coinage and money under the Roman Republic admits that it is not possible to closely date these coins as long as there is not yet a complete study for them. In my paper I will present a die study of the coinage of the roman quaestors of Macedonia assembling the coins from all the important numismatic collections in Greece and abroad, as well as a study of the coin hoards, in order to have a more accurate chronology of these coin series.

232. KOUSOULAS, Dimitrios, University of Bonn

Unbearded Hercules on the coins of the Sicilian cities in the late 5th c. BC: some thoughts on the iconographical type and its spreading in the sculpture

The iconographical type of unbearded Hercules appears at first on the coins of the Sicilian cities in the late quarter of the 5th century BC. Hercules, the reknown hero of the Greek cities, was popular in Magna Graecia; a great temple in Agrigento was dedicated to him. A lot of findings from South Italy are decorated with the myths of Hercules. The earliest representation of Hercules at a young age (unbearded) is found on a silver tetradrachm of Kamarina in south-east Sicily. That is a work of the engraver Exakestidas. This iconography is probably connected to a –today unknown- statuary type of the 5th century BC. This is also implied through the adoption of the same iconographical types on contemporary coins of other Sicilian cities. These kind of depiction of Hercules as a young man became very popular in the 4th century BC through the artistic creation of the Parian sculptor Skopas and coexists, in the later periods, with the bearded type of the hero.

233. KOVALENKO, Sergei, The Pushkin State Museum of Fine Arts, Moscow, Russian Federation

Numismatics as media: case of the Northern Black Sea littoral (only in the Proceedings)

The main aim of this paper is to attempt to consider ancient coinages of the Northern Black Sea littoral as peculiar mass media or means of communication used by the local societies. To reach this aim one should a) reveal the whole set of communicative tools numismatics might have used for transmitting information; b) understand what kind of data might have been transmitted with help of such tools; c) find out who might have been recipient of messages transmitted in such way. Northern Black Sea littoral was far Greek *oikoumene* and during the whole ancient epoch represented contact zone between Hellenic civilization and numerous barbarian societies. This situation is reflected in formation and development of the local coinages, which along with traditional for the Greek numismatics features demonstrate some peculiarities. Moreover, in this region various types of the political organisation co-existed during long-time comprising classical models of Greek *polis* with adjusted *chora* as well as bigger structures like Chersonesian territorial state or proto-Hellenistic Bosporan kingdom. It allows to study communicative functions of coinage in various social-political environments and to establish possible link between peculiarities of the state organisation and the role that coinage might have played as media in these societies. Complex analysis of the archaeological, epigraphical and narrative sources combined with classification schemes developed for local coinages can help to specify concrete circumstances of minting and subsequently to clarify problems of information content of coin issues and possible recipients they were intended for.

234. KRASNOBAEVA, Julia, The Pushkin State Museum of Fine Arts, Moscow, Russian Federation

Some new documents and periodization of history of Brenner-Demidov' collection

Some new materials connected with the history of the collection of Swedish numismatics kept in the Pushkin Museum (Moscow) have been found recently in the Department of Rare Books and Manuscripts of the Moscow University Library: *I. Catalogus Nummorum Sueo-Gothicorum...Londini. MDCCXXVIII*. This book could have been working copy that had been used for composing catalogue of the numismatic collection of Paul G. Demidov. *II. Numismatic Manuscript* is a convolute of two manuscripts. The first is in French language titled *Collection de Medailles Svedoises* envoyées à St. Petersburg. Author is Carl Gustaf Fehrman. It is list of 116 medals referred to members of Swedish Royal Family at the end of 18th cent. This manuscript is dated from the time after 1790. The second manuscript is translation of the first one in Russian language. It is dated from the time before 1794. Both manuscripts are connected with the order of the set of medals from Sweden which was made between 1790 and 1794. It is possible that it was Demidov who acted as ordering customer. Seven medals from this list are kept in the Pushkin Museum. We could reconstruct the following periods of the history of the Brenner-Demidov' collection: 1. Collection of Elias Brenner (Sweden, 1660s–1721); 2. Collection of Walter Grainger (Sweden, 1721–1729); 3. Collection of Thomas Grainger? (Sweden, 1729–1760/61); 4. Collection of Pavel Grigorievich Demidov (Russia, 1760/61–1806); 5. Münz-kabinett of the Moscow University (Russia, 1806–1912); 6. Museum of Fine Arts from 1912 until our days.

235. KREJČÍK, Tomáš, Universität in Ostrava, Czech Republic

Die Medaillen von Österreichischen Schlesien im 19. Jahrhundert

Die Medaillen spielten eine wichtige Rolle in der Kommunikation in der öffentlichen Raum. Man analysiert die Stelle der Medaillen in der politischen, nationalen und kulturellen Entwicklung in diesem Region. Auch die Künstler aus diesem Gebiet sind erwähnt und ihre Arbeiten gezeigt.

236. KRMNICEK, Stefan, Universität Tübingen, Germany

Coins in walls: On the archaeological evidence of coins deposited above floor level (only in the Proceedings)

This papers aims to reassess and discuss a hitherto neglected area of numismatic and archaeological study: Roman coins found in walls (above floor level). Such finds are often assumed to simply mirror accidental coin loss by Roman masons during construction works. However, in many cases where coins were deposited and built into walls a thorough analysis of the archaeological context seems to indicate a structured deposition as outcome of ancient ritual practice. Studies on the ritual deposition of coins are still predominantly concerned with sacred structures such as temples and shrines. However, recent studies have demonstrated that also ritual practices in the domestic and private sphere, whilst differing fundamentally from sacred sites, used coins. In this paper, selected case studies from excavation sites in the Northwest provinces of the Roman

world will examine the situational meaning of coins deposited in walls, and will contribute to the current discussion on the function and use of coins beyond that of an economic medium.

237. KROLL, John, Oxford University, United Kingdom

Striking and restriking on folded flans: evidence from Athens, Elis, Thebes, and Aegina

Folded flans were made from thin disks of silver that were heated, folded over, usually twice, and then carefully struck so that the surface tension of the hot metal spread it out into a circular shape. The technique was first recognized from the seams along the edges of Athenian ‘pi-style’ tetradrachms that in 353 BC had been struck from all existing tetradrachms in the city. The earlier tetradrachms were called in, and after being flattened and folded were restruck with a modified reverse type in a reminting program for raising revenue. Further study reveals that many, if not all, other owl tetradrachms were also struck on folded flans—although frequently with such care that seams on the edges may not be visible. There being no changes in type, folded flans were evidently used in these cases for minting from fresh silver. The technique allowed disks of silver to be trimmed to correct weight while cold, thus obviating the serious problems of wastage and obtaining exact weights when casting flans from molten silver on a mass production basis. The technique is also attested in certain series of Elia, Theban and Aeginetan staters, especially those that involved a change in type. Thus at Aegina all of the staters with the new tortoise type that was introduced after Aegina was forced into the Athenian *arche* are now seen to have been minted over earlier turtle staters, confirming that the type change was part of a reminting program for obtaining state revenue.

238. KUETER, Alexa, Germany

Iulisch-claudischer Prinz (Drusus minor?) auf einer Tessera des Münzkabinetts der Staatlichen Museen zu Berlin

The paper discusses the identity of a Julio-Claudian prince on two bronze tokens from the collection of the coin room in Berlin (Münzkabinett, Staatliche Museen zu Berlin, Obj.-No.18203140 and 18203155). The armoured bust is shown from behind holding a spear. The article explores the origin of this highly idealizing and heroizing iconography and tries to identify the young male who has been recognized as Tiberius or Germanicus in earlier discussions on the type. His hairstyle may indicate that it is actually a portrait of Drusus minor, the only son of emperor Tiberius during whose reign the *tessera* have been produced.

239. LA MARCA, Antonio, Università della Calabria / Missione Archeol. Italiana a Kyme Eolica, Italy -
CARROCCIO, Benedetto, Università della Calabria / Missione Archeol. Italiana a Kyme Eolica, Italy

Monete da scavi, scavi con monete: il “laboratorio” della missione italiana a Kyme Eolica (poster)

Gli scavi condotti da 30 anni dalla Missione Archeologica Italiana a Kyme Eolica (Turchia) hanno portato all’emersione di contesti archeologici pubblici e privati sviluppatasi per 23 secoli (dal IX a.C. al XIV d.C.). Sono state rinvenute più di mille monete, per la stragrande maggioranza bronzee, coniazioni locali e dei principali stati che assunsero il controllo di questa città portuale, o entrarono in relazione con essa. La nuova direzione della Missione, creando un vero “Team” numismatico, si è posta il problema metodologico di “far parlare” questi materiali (e altri consimili conservati a Bergama). Si è usciti dalla logica del semplice “catalogo”, per rendere evidente il diverso distribuirsi delle monete nelle singole aree e contesti, e il loro ruolo di “testimone” economico, che non può essere valutato se non anche in relazione dialettica con gli altri “indicatori economici” (a volte discordanti), quali le concentrazioni di determinate classi ceramiche. Il poster sintetizza le scelte adottate e i principali risultati conseguiti.

240. LACH, Katarzyna, University of Warsaw, Polish Centre of Mediterranean Archaeology, Poland

The evidence of use and loss of money in Roman Alexandria. The case of Early Roman structures from Kom el Dikka

Since 2011 the excavations conducted by the Polish Centre of Mediterranean Archaeology in Alexandria focus on the north-western part of the site. Under the modern debris and Moslem Necropolis remains of Early Roman structures were found consisting of four rooms and a 21-meter waste channel belonging to the forica situated in the central part of the excavated area. The thin walls dividing rooms indicates that the structure was most probably a single storey building. Early Roman coin finds from Alexandria Kom el Dikka consist mainly of single finds, though in some cases the clusters of coins are found. Most

of the coins were deposited accidentally and are lower value bronze denominations. The examination of archaeological contexts in which the coins were found aims in interpreting the use of coins and circumstances in which they were lost.

241. LAIGNOUX, Raphaële, Université Paris 1 Panthéon-Sorbonne, France

Se distinguer en disant la même chose? Les discours monétaires rivaux mais similaires des prétendants au pouvoir à la fin de la République romaine (44-30 av. J.-C.)

Les conflits civils qui éclatent après la mort de César entraînent une multiplication des types monétaires romains. Tout autour de la Méditerranée, les imperatores concurrents font en effet frapper de nouvelles monnaies, avec ou sans l'autorisation du Sénat. Ces émissions sont évidemment avant tout destinées à payer leurs soldats, mais elles leur permettent aussi de diffuser des messages spécifiques grâce à leurs images et légendes. Ces «discours monétaires» sont particulièrement intéressants à analyser: ils représentent les discours de légitimation contemporains les plus abondants parvenus jusqu'à nous. Une étude précise et détaillée des centaines de types frappés par les césariens, les républicains et Sextus Pompée durant les années 40-30 permet de montrer que, contrairement à ce qui est affirmé par des sources littéraires postérieures ou encore par une partie de l'historiographie actuelle, les thématiques reprises par les différents prétendants sont très similaires. Cette communication se propose donc de décrire et d'expliquer comment la concurrence politique de la fin de la République romaine a contribué non pas à diversifier mais, au contraire, à homogénéiser les discours monétaires.

242. LANCHI, Cristina, Università di Roma Tre, Italy

La circolazione monetaria in epoca adrianea: alcuni esempi da Roma, dall'Italia e dal limes germanico-retico (poster)

Ricostruzione della circolazione monetaria in epoca adrianea, mediante il confronto dei dati desunti dalla schedatura del materiale proveniente dal sottosuolo urbano di Roma (Sottosuolo Urbano 2, scavi della Commissione Archeologica comunale di Roma e scavi del Governatorato) con i dati disponibili per le province occidentali (in particolare la Germania).

243. LANNIN, Mary N., American Numismatic Society, New York, United States of America

Transitional Obverse Die Linkages in Seleucid Coinages

The Seleucid empire of the third and second centuries BC evolved and shifted as alliances were made, wars were fought and won, and royal territory expanded and contracted. Within this expansive, ever-changing empire, a mosaic of mints produced many coins, and occasionally the dies of one reign continued in use in the next. This phenomenon has been noted as early as the reign of Seleucus II (246-225 BC) and as late as the second reign of Demetrius II (129-125 BC). The mints that employed these transitional dies are widely scattered and do not show a pattern of coordinated activity as far as can be determined. They include Soli, Tarsus, Susa, Antioch on the Persian Gulf, Antioch in Persis, and an uncertain mint located in Mesopotamia. As these are generally smaller mints, it may be that the reuse of dies was related to the lack of a permanent engraving staff like those of the larger mints at Antioch, Ptolemais-Ake, and Seleucia on the Tigris or, with respect to the more distant mints, was caused by the need to continue operations before the arrival of a coin with the proper portrait type. This paper will review all the known transitional die links and consider their significance.

244. LAZZARINI, Lorenzo, Università IUAV di Venezia, Italy

Assus Troadis: the beginning of coinage and new silver coins in the V c. B.C.

The beginning of coinage in the Troad starts in the last quarter of the VI c. B.C. with small fractions issued by Abydus, Cebren and Dardanus, all characterized by the animal symbol of the *polis* (an eagle, a ram and a cock, respectively) on the obverse, and an irregular incuse square on the reverse. To this small group of *poleis* we may now add Assos, whose main emblem was a griffin. This town flourished in the VI c. B.C. and became famous in the second half of the century for an imposing Doric temple dedicated to Athena standing on its acropolis. This new conclusion comes from a reconsideration of the iconography of the archaic griffin (crouching at Assos, seated at Teos) on rare triobols hitherto attributed to Teos that are here more correctly assigned to Assos and dated to 520-500 B.C. thus bringing forward the beginning of coinage in this important Troadic mint by at least two decades. A *tetartemorion* of late V c. B.C. with an astragalus on the obverse is reattributed on the basis of the same consideration. Unpublished fractions that have recently appeared on the antiquarian market are finally dated to the very end of the same century together with the first (very early for the region) emission of a bronze unit.

245. LEHMANN, Robert, University of Hannover, Germany - **VOGT, Carla**, University of Hannover, Germany

Possibilities and limitations of modern coin metal analysis – examples and innovations

Metal analyses can help to answer questions about the source of metals, production technology and chronology of individual coin series. With the development of new scientific methods like laser ablation mass spectrometry (LA) and portable X-Ray fluorescence (pXRF) we are able to perform analyses without visible sampling. On the basis of examples we will show the potential of the new methods. Especially the determination of the trace element fingerprints and of the source of metals by measuring isotope ratios can help to sort coin series chronologically and to determine their connection. At the same time the designation of origin of gold and silver can help us to reconstruct ancient trade routes what is also important for archaeologists. Using the example of Celtic imitations of Greek coins we will discuss on the basis of our series of measurements how much gold really came from the Greek world as soldier pay and how much came from local Celtic sources. Furthermore, a world map of trace element fingerprints for ancient and medieval gold coins will be introduced. We will show what important conclusions can be drawn for archaeological reconstruction of trade routes and for allocation of uncertain objects. As an example we will try to reconstruct the gold transfer between the Roman Empire and India by means of gold coin analysis. In this connection, for the first time we will also discuss in detail the origin of gold and silver for the Axum coinage based on analytical results.

246. LEHMANN, Robert, University of Hannover, Germany

Early bronze coins and bars from Italy and Greece (aes grave) and their metal origin (poster)

It has already been frequently discussed that Etruscan metal sources were especially important for the development of early Italian money (*aes grave*) and that Italian metal may have also been exported as far as Egypt. Also, the copper influx from the Greek islands to Italy has presumably taken place since the earliest times, though not provable until now. Latest studies on the metal sources of *aes grave* and provincial Greek copper coinage like the Olbia dolphins prove an intense trade-off and refute earlier assumptions. The origin of the metals has been determined by lead isotope ratios. The method applied on about 50 *aes grave* and 50 Olbia dolphins was the semi-nondestructive laser ablation mass spectrometry (fs-LA-ICP-MCMS). It could be demonstrated that Etruscan copper was not verifiably traded to Egypt but that Laurion and the Greek islands, primarily Cyprus, have dominated the metal supply. Furthermore, a classification of difficult-to-assign *aes grave* in associated groups was possible.

247. LEMPEREUR, Olivier, CNRS, France - **BLET-LEMARQUAND, Maryse**, CNRS, France

Les frappes de deniers impériaux à Alexandrie à la fin du II^e siècle ap. J.C.

Il est fréquent d'admettre de nos jours que l'atelier d'Alexandrie en Egypte a frappé des deniers à la fin du II^e siècle après J.-C., du règne de Commode à celui de Septime Sévère. Cette communication propose de faire de le point sur ces frappes et d'apporter des preuves sur l'attribution de ces pièces à l'atelier égyptien, grâce à des travaux jusqu'alors inédits: analyses de la composition de plusieurs monnaies, classements par coins des monnaies de Pertinax et comparaison stylistiques avec les monnaies provinciales. Ces nouvelles informations, à manier néanmoins avec précaution, semblent bien montrer qu'il faille rattacher ces monnaies à Alexandrie, notamment en comparant la composition chimique des deniers et celles des tétradrachmes alexandrins. La conclusion apporte des explications sur la raison de ces frappes de deniers délocalisées en Egypte: l'État romain a cherché à économiser des métaux précieux en faisant émettre des monnaies plus légères et au taux d'argent beaucoup plus bas que ceux des deniers émis à Rome, en essayant d'obtenir une équivalence avec la quantité d'argent contenue dans les tétradrachmes.

248. LEONARD, Robert, American Numismatic Society, New York, United States of America

Andronicus Comnenus's Invasion Money of 1181-82

Hundreds of Byzantine electrum trachea of John II and Manuel I have been found which have had their original weight cut approximately in half through hammering and clipping. Previous publications of these coins will be reviewed and the hoards of them discussed. Building on the research of Simon Bendall, the current attribution of these pieces to the Empire of Trebizond will be considered, but rejected in favor of the usurpation of Andronicus Comnenus (Andronicus I), 1181-82.

249. LIANTA, Eleni, Thessalonica Metro Project, Greece

The second 'Thessalonica/2007' hoard of Byzantine thirteenth-century billon trachea

The aim of this paper is to present for the first time the second 'Thessalonica/2007' hoard, which was retrieved together with the first 'Thessalonica/2007' hoard on 16 March 2007, during the archaeological excavations conducted by the Ninth Ephoreia of Byzantine Antiquities for the construction of the Venizelou Metro Station. The new hoard was also recovered intact, but it was significantly larger than the first 'Thessalonica/2007' hoard, and contained 216 billon trachea, the everyday circulating medium in the first half of the thirteenth century. According to the classification of the specimens, both hoards must have been concealed in the second decade of the thirteenth century. This paper will describe the composition of the new hoard in detail, and present its similarities with the first 'Thessalonica/2007' hoard. As will be shown, the two hoards share the same key archaeological, chronological and denominational traits, and were thus concealed contemporaneously and, possibly, by the same person or group of people. The paper will demonstrate the significance of the new hoard with reference to its overstrikes, the predominance of the smallest billon trachea which feature consistently in early thirteenth-century hoards, and the effect of clipping large-module trachea after they were issued with the designs they depicted. Finally, this paper will make clear that the examination and accurate publication of the numismatic sources available for Thessalonica offer new insights into its monetary history, and make a valuable contribution to the study of the economy of this important city during the thirteenth century.

250. LOCATELLI, Stefano, The University of Manchester, United Kingdom

Aspetti della monetazione dei Regni di Napoli e Sicilia nel Cinquecento: due tesori inediti dall'isola di Lipari

This paper deals with the study of two coin hoards found in the island of Lipari during the twentieth century and now preserved in the Museo Archeologico Regionale 'Paolo Orsi' in Syracuse (Sicily). The hoard of Lipari 1 was concealed in the years immediately following 1548 and it consists of 38 silver coins from the mints of Naples and Messina. The hoard of Lipari 2 dates roughly from 1571 to 1587 and it contains 296 specimens from the mints of Naples, Messina, Malta and the Iberian Peninsula. Due to the scarcity of information about each hoard, it is not possible to clarify the reasons and the historical events that generated their abandon. However, on the basis of objective data provided by the analysis of their composition, new considerations on certain specimens can be developed. This is the case of the silver carlini of Charles V with an undefined mark in Lipari 1, or the Iberian coins of the Catholic Monarchs in Lipari 2, along with the silver reales that Charles V minted in Barcelona for the conquest of Tunis in 1535. Their study will allow us to shed new light on the monetary circulation of the island of Lipari and the Southern Italy during the sixteenth century.

251. LOMBARDI, Luca, Accademia Italiana di Studi Numismatici, Bari, Italy

Memmo Cagiati e l'opera "Le monete del Reame delle Due Sicilie"

Si vuole richiamare l'attenzione sulla figura di Memmo Cagiati che con l'opera "*Le monete del Reame delle Due Sicilie da Carlo I d'Angiò a Vittorio Emanuele II*" pose una prima corretta classificazione per le monete del Reame di Napoli. A distanza di un secolo dalla pubblicazione l'opera viene consultata con vantaggio. Il Cagiati pubblicò numerosi altri lavori scientifici sulla monetazione dell'Italia meridionale, sin dall'Alto Medioevo.

252. LOMBARDI, Luca, Accademia Italiana di Studi Numismatici, Bari, Italy

Antonino Salinas: cento anni dalla scomparsa (poster)

A cento anni dalla morte si ricorda l'impegno dell'archeologo siciliano Antonino Salinas a favore degli studi numismatici.

253. LOPEZ, Cédric, OMNI Numismatic, France – **ARSLAN, Ermanno**, Accademia Nazionale dei Lincei, Italy

Die Design Reconstruction: Merging Numismatics with Information Technology (poster)

Numerous ancient coins were struck with dies that were larger than the blanks. Consequently, these coins do not show the complete coin design. This is the case of Celtic coins, Visigothic, Barbarian imitations and Indian medieval coins. Our objective is to reveal the complete coin design precisely as they appeared on the original dies at the time of striking. Using

specific die markers and die breaks in coins to identify the original die, we propose an innovative methodology of *Die Design Reconstruction (DDR)* using Information Technology and more precisely imaging techniques. This simple and reproducible method consists of overlaying with great precision, high definition digital photographs of die markers in incomplete coin designs to “reconstruct” the original die design. Such a method allows us to discover previously unknown coin designs, shed light on lost ancient knowledge and reveal new representations of gods, rulers, etc. In this article we firstly define the method of *Die Design Reconstruction (DDR)*. Then we will apply *DDR* to the Celtic drachms of Southern Gaul. Finally, we will present the first results obtained of complete coin designs as engraved on the dies 2200 years ago. *Die Design Reconstruction* using Information Technology is an innovative method which can create new research subjects for all time periods, particularly through the iconographic study of the newly revealed symbols and elements present on the coins. Furthermore, *DDR* contributes to a better understanding of ancient coin mint organization and to more precise coin classifications.

254. LUDKE, Melissa, Smithsonian Institution, Washington, United States of America

Three nymphs around a fire: the factors impacting iconographical representation on provincial coinage from Apollonia, Illyria (poster)

Numismatic material can be an informative source for studying the habitation of an archaeological site. Numismatic artifacts do not only provide a source for understanding chronology, but also presents archaeologists with the ability to delve deeper into the motivators behind human occupation. Within the Roman provinces, images on coinage could include symbols of public identity during a time of Republican and Imperial oppression. At the Greek colony of Apollonia in Illyria, coins minted during the 1st century B.C.E. reflect a need for self-definition and legitimacy through changes in iconographical representations. The numismatic study of a 1st Century B.C.E. coin depicting three nymphs dancing around a nymphaeum, along with archaeological evidence recovered at Apollonia, aids in revealing the site’s political and economic context, as well as the factors prompting the establishment of patron coinage during the era that Apollonia was a provincial city beneath the rule of Ancient Rome.

255. MAGUB, Alexandra, The British Museum / University of London, United Kingdom - **SARKHOSH CURTIS, Vesta**, The British Museum, London, United Kingdom - **ALRAM, Michael**, Kunsthistorisches Museum, Vienna, Austria

Sylloge Nummorum Parthicorum: Coins of Mithradates II

The reign of Mithradates II (c. 123-88 BC) marks an important period as the Parthian kingdom was transformed into an empire that stretched between Bactria in the East and the Euphrates in the West. This paper will examine the iconographic and epigraphic changes on Mithradates II's silver drachms and bronze coins, focusing on the royal costume, jewellery and headdress on the obverses; and on the reverses, the royal archer's throne, the increasingly complex epithets, and the diverse designs across bronze denominations. These changes illustrate the ideological shift that took place as the Arsacid dynasty consolidated itself as a dominant Iranian power in the region for the first time since Alexander's conquest of Persia in 330 BC. Mithradates' drachms and *chalkoi* succeeded in both continuing Hellenistic Seleucid monetary traditions, and empowering Iranian concepts of kingship and the divine. In light of this dynamic contact between Hellenistic and Iranian traditions, this paper will briefly examine whether iconographic changes in Mithradates' bronze coinage are similar to those developing in the silver drachms. Do the mints which are spread widely across the Parthian Empire, from Margiana to Susa, influence the designs on coin types from each locality? This evidence may better inform us about aspects of Iranian political and religious ideology during this period. This paper will begin with an introduction by Dr Michael Alram (Austrian Academy of Sciences) and Dr Vesta Sarkhosh Curtis (British Museum), the joint-directors of the *Sylloge Nummorum Parthicorum (SNP)*, who will talk briefly about the *SNP* and its progress.

256. MAIRAT, Jerome, Ashmolean Museum, University of Oxford, United Kingdom

Tetricus and his son: coinage and chronology

Since the works of Elmer, the coinage of Tetricus I is well-known, but the structure of the issues, the mints and the chronology of the reigns are not without problems. The epigraphic evidence is here used in conjunction with coins, and some modifications to the arrangement of the issues are here presented.

257. MÄKELER, Hendrik, Uppsala University, Sweden

Money production as a lifestyle

Historians often regard numismatics and monetary history only as an auxiliary science that has little to offer to the general historian. This paper is intending to prove them wrong. Its ambition is to “translate” numismatic information, which is already well-known within the numismatic community, into a language well-known to historians. It is thereby drawing on medieval matters in the first hand, in order to show that the production of money was a key concern to any medieval authority. Indeed, this was the case to such an extent that money production may be referred to as an important aspect of the lifestyle of any medieval nobleman who was of any importance.

258. MALARCZYK, Dorota, The National Museum in Krakow, Poland

The Early-Medieval Silver Hoard from Dębicz, Greater Poland

The coin hoard was discovered in 1936 while clearance of trees in a forest. A pot had been struck with a spade, coins and ornaments were divided among the finders. The deposit was scattered. The hoard contained unknown quantity of silver coins and ornaments, in 1936 2 complete specimens and 36 dirham fragments, as well as a part of ornaments reached by Z. Zakrzewski, the author of a preliminary analysis on the find. Zygmunt Zakrzewski noted down more than 30 g of silver, J. Wojtczak estimated the weight of silver as amounting to 250 g. In 2005 in the place of first discovery 146 dirham fragments as well as 54 fragments of ornaments of a total weight 54,86 g were discovered. The hoard consists of Umayyad, ‘Abbāsid, Ṣaffārid and Sāmānid dirham fragments and imitations of Islamic dirham. Most numerous are fragments representing emissions of Sāmānid amīr Naṣr ibn Aḥmad (301–331 = 914–942/3) struck in the mints of Transoxiana at Samarqand and aš-Šāš. Analysis of the hoard made it possible to specify the hiding date as approx. half or 3rd quarter of the 10th century.

259. MANENTI, Angela Maria, Museo Archeologico Regionale "Paolo Orsi", Siracusa, Italy

Dee, ninfe, donne: oggetti di ornamento nell'iconografia delle monete greche e in vari altri reperti nel Museo Archeologico 'Paolo Orsi' di Siracusa

Analisi dei gioielli greci conservati nel Museo Archeologico Regionale Paolo Orsi di Siracusa a confronto con l'iconografia delle monete, specie della zecca di Siracusa, e con i particolari di altre classi tipologiche (terrecotte e ceramica): valore iconico e semantico dell'ornamento.

260. MARANI, Flavia, Università di Pisa, Italy

Il cosiddetto “Tesoretto di Sessa Aurunca” e la tesaurizzazione in Italia centrale alla metà del VI secolo

Sequestrato nel 1917 nelle campagne di Sessa Aurunca (provincia di Caserta) e conservato al Museo Archeologico Nazionale di Napoli, il “Tesoretto di monetine di bronzo bizantine (follari o nummi)” è noto agli studiosi grazie alla relazione curata da Alda Levi e pubblicata in *Notizie degli Scavi di Antichità* due anni dopo. Si dava così notizia del ritrovamento, apparentemente congiunto, di due monete d'oro e di circa 2000 monete di bronzo di piccolo modulo, attribuite in massima parte agli imperatori bizantini ed ai sovrani ostrogoti. Il nucleo monetale viene ora brevemente presentato, dopo essere stato studiato nella sua interezza nell'ambito del dottorato di ricerca svolto in co-tutela fra le cattedre di “Archeologia Medievale” dell'Università degli Studi di Pisa e di “Numismatique et économie monétaire de l'Occident médiéval et moderne” dell'École Pratique des Hautes Études. Prendendo spunto dai ripostigli monetari editi e dalla panoramica emersa nel corso della ricerca dottorale, incentrata sulla circolazione monetaria nel territorio del basso Lazio e dell'alta Campania, il presente contributo si propone di approfondire alcuni aspetti della tesaurizzazione che si manifesta durante (ed all'indomani) delle guerre greco gotiche nell'Italia centro meridionale.

261. MARCHAND, Sylvain, University of Brest, France

Electrum Coinage of the Ionian Revolt: The Complete Series of Abydos

After the adoption of the bimetallic system by Croesus, the electrum coinage gets very limited. For the milesian standard (stater of approximately 14.15 grams), it is known mainly by staters first associated to the Ionian Revolt (499-493 BC). Their

reverse shows a quadripartite incuse square. The coin attributed to Abydos shows on the obverse an eagle standing (typical of this city), with its head reverted though. In the Rosen collection was a 1/48th stater of the same type. And in the auction sale for its dispersion was also a 1/3rd stater (*trite*). But at that time the link between these exemplars was not clear. More recently, one 1/24th stater (*myshemihekte*), at least three 1/12th staters (*hemihektes*) and one 1/6th stater (*hekte*, ex Rosen collection but unpublished) showed up in public auctions. Again, they appeared independently, and remain unpublished (but from the auction catalogs). However, it is likely that we have now a complete series, which is particularly interesting, since two 1/12th staters are from the same die, probably used for a 1/3rd stater initially, and also used to strike a 1/24th stater (only the head of the eagle appears, the die being then much larger than the flan). Yet, many specimens remain unpublished. The present work aims at making an exhaustive catalog of these coins, the electrum series of (possibly) Abydos for the Ionian Revolt, to serve as a first reference, as new exemplars tend to appear on the market.

262. MARCHAND, Sylvain, University of Brest, France

The IBISA System for Computer-Assisted Coin Identification and Hoards Study (poster)

The *IBISA* (*Image-Based Identification/Search for Archaeology*) system was designed to help the user decide, from their digital images, if two ancient coins are either the same, come from the same die, share resemblance in style, or are completely different. This decision is extremely useful for the study of coin hoards, which can inform us about the original production process, chronology, geography, etc. *IBISA* uses computer vision methods to get rid of the viewing conditions when searching for similarities in the databases. To cancel rigid transforms (translation, rotation, scaling) inherent to the photography, the system uses a global registration method based on the Fourier transform. Also, to be resilient to the lighting conditions, the system can use a 3D model for each reference coin, and either a standard image or such a model for each coin to be identified/studied (target). The acquisition of this model can be done in museums thanks to a special numismatic dome (using Reflectance Transform Imaging). The model makes the system more accurate, but is also useful for interactive visualization and museography. The *IBISA* system shows promising results, for the semi-automatic study of die links. Yet it has to be extensively tested, with images and models from coin collections. The graphical methods have been published in technical conferences. The aim of this presentation is to introduce the system (dome and software under development) to the numismatic community, possibly to generate collaborations for the digitization of numismatic collections and the study of coins hoards.

263. MÄRCHER, Michael, The National Museum of Denmark, Copenhagen, Denmark

The monetary development in Bornholm in the 12th-13th centuries

The Danish isle Bornholm in the Baltic Sea is famous for its rich Viking age silver hoards of the 10th-11th centuries, but what happened afterwards? This paper examines the medieval monetization of Bornholm through a study of the coin finds from castles, churches, towns, and rural areas. Almost no coins from the first half of the 12th century are found in Bornholm. Coins from mid-12th to mid-13th century appear in significant numbers on the important castle Lilleborg (Small Castle), and some coins from the late 12th century and the 13th century are found in the isle's medieval churches. Apart from them coins struck before the 1270-80s are generally not found, suggesting that the rural monetization of Bornholm began in the last quarter of the 13th century. This paper is part of a post doc-project about the monetary development in Bornholm from the early 12th century to the late 19th century. Finds of coins struck before 1537 in Bornholm provide a very representative sample, as finds of medieval and older coins have been registered in details since the early 19th century, and during the last decades Bornholm is being surveyed intensely by very competent metal detector users working in cooperation with the Museum of Bornholm.

264. MARCHESI, Enrico, Università di Bologna, Italy - BALDI, Elena, Italy

Rinvenimenti numismatici basso-medievali nel contesto archeologico di Monte Lucio (Re)

Con questo contributo si vuole presentare lo studio di 68 monete rinvenute durante lo scavo del castello medievale di Monte Lucio, situato nel territorio del Comune di Quattro Castella, in provincia di Reggio Emilia. Il sito è stato interessato dalla costruzione di un fortilizio basso-medievale che ha lasciato numerose tracce architettoniche e materiali, tra le quali risultano di primaria importanza gli apporti numismatici, in grado di consentire la datazione del sito, delle strutture abitative ed ecclesiastiche e l'indagine dei traffici commerciali che hanno coinvolto il contesto in esame. L'analisi del materiale numismatico ha permesso di individuare numerose zecche, situate nell'Italia centro-settentrionale, ed ha reso possibile circoscrivere cronologicamente le fasi di vita del castello ed il successivo periodo di senescenza e abbandono, caratterizzato da fasi di frequentazione sporadica di età rinascimentale. È necessario sottolineare la presenza di un cimitero, annesso alla piccola chiesa rinvenuta, che ha restituito alcune inumazioni contraddistinte dalla presenza di ritrovamenti monetali in grado di fornire

uno specifico *terminus ante quem* alla sepoltura stessa. Le monete rinvenute restituiscono uno spaccato incredibilmente eterogeneo e ricco, soprattutto dal punto di vista della diffusione e dell'utilizzo nelle transazioni commerciali, delle coniazioni Comunali tra XII e XIV secolo.

265. MARCOS ALONSO, Carmen, Museo Arqueológico Nacional, Spain - **OTERO MORÁN, Paloma**, Museo Arqueológico Nacional, Spain

El último viaje de la fragata Nuestra Señora de las Mercedes. Un tesoro cultural recuperado (only in the Proceedings)

Se presenta la exposición realizada en el Museo Arqueológico Nacional (Madrid) en 2014, cuyo objetivo fue acercar al público la historia de este buque español hundido a principios del siglo XIX. Sus restos arqueológicos, entre los que figuraban más de 14 toneladas de monedas de plata y oro de época colonial, fueron expoliados por la empresa norteamericana “cazatesoros” Odyssey Marine Exploration y trasladados a los Estados Unidos. Tras cinco años de litigio, los tribunales norteamericanos dieron la razón a España en sus reclamaciones, reconociendo sus derechos y ordenando la entrega inmediata de las monedas. La misteriosa nave de la que procedían las monedas no era otra que la fragata de la Armada española Nuestra Señora de las Mercedes, hundida el 5 de octubre de 1804 durante un ataque británico frente al sur de Portugal cuando regresaba de Lima y Montevideo con un importante cargamento de caudales de la Corona española. La exposición revivió esta emocionante historia a través de una presentación rigurosa y documentada, pero al mismo tiempo entretenida y atractiva. En ella se presentan las monedas recuperadas, reales de a ocho en su inmensa mayoría y también piezas de ocho escudos acuñadas en las cecas indianas, destacando la importancia internacional de esta moneda en la época.

266. MAREST-CAFFEY, Laure, University of California, Berkeley, United States of America

Images of Power in Seleucid Persis: a New Study of the Victory Coinage from Susa

The silver coinage featuring a helmeted male head on the obverse and Nike crowning a trophy on the reverse minted by Seleukos I Nikator at Susa has long been the object of scholarly interest. The striking portrait with its idiosyncratic iconography and the rarity of the type has made it a prized possession of collectors as well as a target for imitators—ancient and modern. Historians and archaeologists have used it to illuminate the early history of the Seleucid Empire, and more particularly its relationship with local elite in Persis, a topic of much significance in the current effort to reappraise Seleucid strategies. The last decade has seen an increased number of new “trophies” appearing on the market as well as a better understanding of Seleucid administration and policies. The conclusions of the last—and only—die study of the mint of Susa, published in 1997, are thus in need of updating. The goal of this paper is twofold: first, to present the results of the die study; and second, to provide a new commentary on the iconography and significance of the series. Since no hoard containing “trophies” has been unearthed west of Babylonia and most came from Persis, the victory coinage was clearly conceived and circulated as an “Eastern” coinage. The intended audience explains the innovations and short life of the type. A strict *interpretatio graeca* impoverishes the complexity of this polysemic coinage cleverly incorporating elements of Persian iconography of power with Greek visual and cultural traditions.

267. MARINESCU, Constantin, Pace University, United States of America

Paying the barbarian: Byzantium's late Lysimachi and their role as mercenary money

The late coinage in the name of King Lysimachus struck by the city of Byzantium has been studied as part of François de Callatay's great work on the coinages of the Mithridatic Wars. Characterized by an increasing degradation of style, this coinage was apparently destined to meet the payroll of mercenaries in Mithridates' army. The carefully constructed groupings established by Callatay have up to now stood in isolation, almost as spurts in minting activity that have come and gone. In this paper I propose that these coins are not insular, beginning production at the mint of Byzantium, and then morphing into an independent officina or mobile military mint. Of greatest importance to my discussion are several newly documented coins which employ dies from Byzantium's regular Lysimachi series coupled with stylistically idiosyncratic partners. These are the first in a coining tradition defined by a very strange aesthetic idiom. This newly associated grouping is therefore a bridge between Byzantium's traditional Lysimachi series and what appears to be a mobile workshop, operating in a more haphazard fashion, producing stylistically different products that try to imitate their well-established Byzantine counterparts. These, in turn, appear to expand into the emissions of the Mithridatic Wars, which include staters that employ the features of Mithridates VI. It is therefore my intention to document the development of this subsidiary minting establishment through stylistic analysis and die linkage and propose that it came into being rapidly to supply much needed pay for mercenaries well accustomed to this coinage.

268. MARKOU, Evangeline, National Hellenic Research Foundation, Athens, Greece

From SilCoinCy to Kyprios Character. Concept and realisation of a numismatic web-based project

The paper will focus on the research project "*SilCoinCy: the silver coinage of the kings of Cyprus, numismatics and history of the archaic and classical periods*" that will have been undertaken for an 18 month period (January 2014-July 2015) in the National Hellenic Research Foundation, Greece. From the initial concept of the research proposal to the acquiring of funding, the various steps of the process will be traced. Then, the progress of realisation of the project via the collaboration of researchers - not only numismatists -, institutions and coin cabinets will be put into perspective. The outcome, but also questions related to the collaboration of disciplines, the accessibility of the numismatic material, the control but mainly the update of the web content will be presented and discussed.

269. MARTIN, Katharina, University of Muenster, Germany

Strangers in Rome? 'Foreign' deities and the numismatic evidence

Rome used to import gods and goddesses, assimilated or transformed them and integrated them into a growing Roman pantheon. Some of these deities from abroad reached the city by an official *evocatio* in the course of military conquests, others were brought to support the Romans in situations of distress and disease (e.g. Aesculap from Epidaurus in 293 BC or Cybele from Pessinus in 205/4 BC). Besides there were other forms of cult-adoption into the Roman religious system which happened uncontrolled in the course of a wider dissemination of personal customs, practices, and rituals. Having become part of Roman identity some of the original 'foreign' deities can already be found on republican coins (as in the case of Cybele), others – like Aesculap – are missing. Since literary sources often report from a later perspective (1st cent. B.C. and later), coins are the only contemporary source for an estimation of the early 'Romanised' cult. The paper will systematise presence and absence of imported deities in republican coinage and ask for the reasons of their numismatic occurrence. Analysing the historical contexts as well as examining coin-hoards for the dissemination of types will elucidate the purpose of these issues and probably identify specific target groups.

270. MARTÍN ESQUIVEL, Alberto, Universidad de Salamanca, Spain

La moneta nel contesto archeologico. Scavi al santuario e al vicus di Villa San Silvestro (Cascia, Italia)

Gli scavi archeologici del *vicus* e del santuario di Villa San Silvestro di Cascia, condotti dall'Università di Perugia, hanno restituito dal 2006 al 2012 un totale di 178 monete databili tra la Repubblica e l'Alto Medioevo. Il presente contributo intende offrire una analisi preliminare dei reperti numismatici in rapporto al loro contesto stratigrafico e ai manufatti ad esso associati. Verranno esaminate a tale scopo le monete di epoca repubblicana. Si vuole da un lato apportare nuovi dati per lo studio sulla circolazione monetale nell'Italia centrale – in particolare nell'*ager nursinus* in età repubblicana – e dall'altro compararne i risultati con quelli degli studi precedenti.

271. MARTINO, Amos, Italy

Lyre's representation on ancient Greek coins: a musical and political path between symbol and Realien

La documentazione monetale greca offre rappresentazioni molto precise di varie tipologie di lira – *kitharai*, *barbita*, *phormingai*, *cheleis* – con una diffusa distribuzione geografica e continuità temporale (dal V al II a.C.). La lira come tipo principale ricorre perlopiù in abbinamento con la testa di Apollo al diritto, in quanto attributo principale del dio. In altre serie, invece, al diritto si trovano diversi soggetti: Artemide, Hera, Athena, Dioniso, teste femminili, oggetti d'uso, simboli cittadini. Nella prospettiva di una lettura del linguaggio iconico, l'uso di questa simbologia apollinea appare riferirsi all'idea di armonia politica di cui il dio delfico si fa garante, secondo una sedimentata tradizione ideologica. Il ricorso alle immagini monetali si rivela di estrema utilità per lo studio della *kithara* dal punto di vista organologico, in considerazione della specificità della moneta come fonte storica, in un contesto – quello degli studi organologici – in cui il materiale iconografico è stato tratto in modo prevalente, se non esclusivo, dalla pittura vascolare. La documentazione numismatica raccolta offre tracce preziose per individuare *Realien* collocabili in un tempo e in territori precisi, suggerendo in alcuni casi l'evoluzione epicorica dello strumento. In tal senso, un esempio sono le serie monetali di Rhegion di I e II guerra punica con Artemide/*kithara*, in cui è possibile riconoscere un modello preciso di *kithara*, coerente con una più generale evoluzione dello strumento, ma con caratteristiche proprie che lo distinguono dai modelli altrimenti noti.

272. MARTINS MAGALHÃES, Marici, Museu Histórico Nacional, Rio de Janeiro, Brazil

Le monete romane repubblicane del Museo Storico Nazionale - Rio de Janeiro

La presentazione del nuovo catalogo dal titolo "*Sylloge Nummorum Romanorum* Brasil - Moedas Romanas Republicanas do Museu Histórico Nacional", Rio de Janeiro, ormai MHN. Il lavoro dell'autrice ha riguardato la catalogazione e per la selezione di più di novecento monete della cd. "Collezione Commendatore Antonio Pedro de Andrade". Tale volume fa parte della collana museale iniziata con la pubblicazione della collezione di monete greche e provinciali romane nel 2011, la "*Sylloge Nummorum Graecorum* Brasil I", della stessa autrice. Inoltre, sarà presentato il progetto già in corso per la catalogazione della prima parte delle monete di Roma Imperiale, la cd. "*SNR II* - da Augustus fino a Vitellius".

273. MARVEGGIO, Chiara, Raccolte Artistiche del Comune di Milano, Italy

La collezione numismatica Sabetta: Constantinus I - Licinius (note al RIC VII) (poster)

La schedatura della collezione di Luigi Sabetta (1701 *folles* di epoca costantiniana acquistati nel 1989), attualmente conservata presso il Gabinetto Numismatico e Medagliere di Milano, ha permesso di mettere in luce, partendo dagli studi pubblicati dal collezionista sulla Rivista Italiana di Numismatica, l'esistenza di numerose varianti rispetto al RIC VII, riferimento privilegiato per la compilazione del Catalogo, e di alcuni pezzi inediti rispetto a titolature, tipi monetali e/o autorità emittenti. Si affronta in particolare la tematica relativa alla presenza di curiosi simboli accessori presenti sul dorso della lupa nelle emissioni di *Urbs Roma*, interpretabili in rapporto a possibili scelte specifiche delle singole officine delle zecche imperiali, rispetto alle quali è possibile osservare, in alcuni casi, una non casuale ricorrenza.

274. MATTHIES, Sandra, Germany

Selected aspects on Roman successors on Alexandrian coins

The representation of ancient roman successors on Alexandrian coins is various during the roman reign in Egypt, but commonly you can always identify their appearances on the coin obverses by a special canon as the missing laurel wreath and their legends with the names and the title of a Caesar at the end. But during the Severan period two successors were partly represented as Augustus, who still have been Caesars. This is a fact, because of the regnal years on Alexandrian coins. On two known tetradrachms of the 9th regnal year of Septimius Severus (200/201 A.D.) his second oldest son Geta is shown with a laurel wreath on his head. Since the beginning of the Roman imperial period only Augusti were permitted to wear this imperial sign, but Geta did not become Augustus before 209 A.D. A couple of years later something equally remarkable happened, when Macrinus' son Diadumenian has been pictured with the title CEBACTOC on the obverse legends in Egypt. Compared to Geta, whose portraits with a laurel wreath has got through to us in only two recorded coins, Diadumenian is stated Augustus on all known Alexandrian coins from the first year of his father's reign. Both are very exceptional aspects on the Severan coins of Alexandria and therefore worth to take a more detailed look.

275. MATZKE, Michael, Historisches Museum, Basel, Switzerland

Back to Gold – the beginning of western medieval gold coinage in the light of new classification

The return to gold coinage in 13th century Italy is one of the most discussed issues in medieval monetary history, although the date of the introduction of Frederick's II gold *augustalis*, in 1231, as well as that of the Florentine gold *fiorino* and Genoese *genovino d'oro*, in 1252, are well-known. It is only the importance and impact of this monetary innovation and the identification particularly of the 1252 mentioned Genoese gold coin, with its implications, which provoked long discussions and challenged even the well-documented date of 1252. The new classification of all communal coin types of Genoa in the course of the Medieval European Coinage publication project allows now a new and material-based identification of the first western gold coin and resolves some of the long-discussed problems around the return to gold.

276. McCABE, Andrew, United Kingdom

The Roman Struck Bronze Coinage in South East Italy during the Second Punic War

The Roman coinage in South East Italy during the Second Punic War was assigned by Michael Crawford in RRC to four mints or areas: S.E. Italy (RRC 83-89), Luceria (RRC 43, 97-99) Canusium (RRC 100), and Apulia (RRC 102-103). New research, principally on the struck bronze coinage of these issues, has established links between issues previously considered as separate, and separation within issues previously considered as coherent. These links and separations are based on observations on manufacturing technique, engraving style, noteworthy design details and die links. When combined with find information and with recent historical research on the period, they allow us to reconsider minting arrangements during this period, and consequently shed light on the economic need for Roman coinage at certain times and places during the war. The focus of this study is on the struck bronze coinage identified in RRC as being from S.E. Italy, whilst drawing inferences from the coinage assigned in RRC to Luceria, Canusium and Apulia. Ongoing studies by this author as well as by others who are focusing on the period, are providing new insights into the coinage and history of the Second Punic War.

277. MERTENS, Carolien, Belgium

Identification of the Lernean Dionysos on a Roman provincial dupondius (poster)

Background. The “beardless Dionysos standing, holding *kantharos* and *thyrsos*” issue on Roman bronzes struck in Argos' mint under Hadrian has been categorized as “a very unusual type” (Imhoof-Blumer – Gardner, 1964, p. 40), and might be representing one of the Argive Dionysos' described by Pausanias – either the Kresios or the Lernean god (Flament – Marchetti, 2011, p. 79). Our objectives were to demonstrate (1) how this particular reverse type fits within the iconographic framework of Roman coins themed around Argos' religious patrimony, and (2) how it is related to other numismatic representations of the god Dionysos in Argos' monetary corpus and that of two other Peloponnese cities, Sicyon and Hermione. Method. We compare this iconographic type to seemingly similar issues with minor variations – such as the god with or without beard, with or without a panther at his feet – from other Peloponnese cities and put it in its religious local and regional context by analyzing our outcomes against the backdrop of Pausanias' *Periegesis* and Nonnos' *Dionysiaca*. Our results suggest that the Argive issue depicts the young Lernean Dionysos, who is associated with the Earth, and fulfills a chthonic role within Argos', Sicyon's and Hermione's religious scheme. The numismatic testimony shows that this Lernean Dionysos, possibly worshipped since the Archaic period, still holds an established position during the Roman era.

278. MILITKÝ, Jiří, Archeologický Ústav AV ČR, Prague, Czech Republic

Das keltische Münzwesen des Horizonts LT C1 und C2 in Böhmen (Tschechische Republik)

Im Lichte neuer Funde ist es offensichtlich, dass auf dem Gebiet Böhmens im Horizont LT C1–C2 vor allem Münzen aus der Gruppe sogenannter böhmischer Lokalemissionen geprägt worden sind. Es geht um Goldmünzen des grundsätzlich gleichen Währungssystems wie die Emissionen Athéné Alkidemos, aber ikonographisch sind diese Prägungen völlig unterschiedlich und wir begegnen hier einer bunten Mischung von Motiven. Schon K. Castelin hat aufgrund der Gewichtsanalyse erkannt, dass diese Münzen in zwei Zeithorizonte geteilt werden können. Es darf als interessant gelten, dass in der früheren Mittellatènezeit (LT C1) auf dem böhmischen Gebiet parallel die Drittelstatere und die neu erkannten Viertelstatere geprägt wurden – belegt sind vier Typen. In den letzten Jahren gelang es eine ganze Reihe von neuen Typen der Silberboli zu dokumentieren, die auf böhmischem Gebiet entstanden sind. Metrologisch und durch ihre Ausführungsform ähneln sie den Typen Roseldorf/Němčice I und II, die Ikonographie ist aber wiederum völlig unterschiedlich. Manche dieser Münzen repräsentieren die kleinsten Nominalen zu den Goldprägungen aus der Gruppe sogenannter böhmischer Lokalemissionen, andere zeichnen sich durch ikonographische Eigenständigkeit aus. Es ist wahrscheinlich, dass sowohl die Gold- als auch die Silbermünzen der Gruppe der sogenannten böhmischen Lokalemissionen entstammen, die auf dem böhmischen Gebiet etwa seit der Mitte des 3. Jahrhunderts bis zum Ende des zweiten Drittels des 2. Jahrhunderts vor Christus geprägt wurden.

279. MIŠKEC, Alenka, Narodni muzej Slovenije, Ljubljana, Slovenia

Roman coin hoards from 3rd century in the territory of present day Slovenia

The turbulent times of 3rd century are indicated by the burial of numerous hoards of money and also jewellery. The chronological classification of coin hoards shows that in the 3rd century in the provinces along the Danube the greatest

number of hoards was buried in the middle of the century or later. Three periods of deposition can be distinguished in the province of Pannonia in a span of two decades. The burial of the first group of finds in 253–254 was most probably caused by the march of the usurper Aemilianus, the second group is related to attacks by the Iazyges and Roxolani in 259–260, the burial of the hoards of the third group can be related to the invasion of Alamanni and Juthungi in 270. In our paper we will focus on the coin hoards from the second phase and from the province of Pannonia Superior. Namely the territory of present day Slovenia was divided into three parts; eastern part belonged to the province of Pannonia Superior, NW part to the province of Noricum and SW part to Italy.

280. MOLINARI, Maria Cristina, Sovrintendenza Roma Capitale Musei Capitolini, Italy - **CECCARONI, Emanuela**, Soprintendenza per i Beni Archeologici dell'Abruzzo, Italy

I reperti numismatici provenienti dai recenti scavi del santuario di Ercole di Alba Fucens (poster)

Negli scavi recenti del santuario di Ercole ad Alba Fucens è stato riportato alla luce un pozzo profondo circa sette metri e con diametro di 4,13 metri. In esso sono stati rinvenuti, sigillati dal crollo della copertura e dagli strati di macerie determinate probabilmente da un evento sismico databile tra 484 e il 508 d.C., un deposito monetale votivo più antico pertinente alla fase di vita del santuario.

281. MONDELLO, Cristian, Università di Messina, Italy

Nuove osservazioni sui contornati: la serie dei Literaten-Büsten

I medaglioni di bronzo tardoantichi dal bordo rialzato, comunemente designati con il nome seicentesco di 'contornati', rappresentano ancora oggi un caso numismatico complesso e di difficile risoluzione. Prodotti probabilmente a Roma dalla metà del IV alla fine del V secolo, essi sono stati oggetto di una serie di fondamentali studi di A. Alföldi (*Die Kontorniaten*, I-II, Leipzig 1942-43; A. Alföldi – E. Alföldi, *Die Kontorniat-Medaillons*, I-II, Berlin 1976-1990), che li ha considerati come doni per il Nuovo Anno distribuiti dall'aristocrazia romana e, al tempo stesso, come espressione di *Pagan Propaganda* con funzione anti-cristiana. Il presente studio intende focalizzare l'attenzione sulla serie dei *Literaten-Büsten*, la quale è costituita da 133 pezzi che rappresentano immagini di scrittori e di filosofi appartenenti all'antichità greca e romana (Omero, Solone, Socrate, Demostene, Anassarco, Accio, Terenzio, Sallustio, Apollonio di Tiana ed Apuleio). Ad integrazione della serie si presentano due nuovi esemplari provenienti da recenti vendite d'asta (2014), con raffigurazioni di Erodoto e di Sallustio al diritto, che favoriscono una maggiore comprensione della serie e riaprono l'annosa questione dell'identificazione di SALVSTIVS AVTOR effigiato sui contornati fino ad oggi noti.

282. MONTANARO, Stefania, Università del Salento, Lecce, Italy

La monetazione dei centri peuceti

La documentazione numismatica come apporto alla ricerca storica, in un territorio come quello della "Peucezia", dove le fonti storico-letterarie a nostra disposizione risultano non solo scarse e frammentarie, ma talvolta anche contraddittorie, e pertanto non sufficientemente eloquenti ad illustrare i rapporti economici e gli avvenimenti socio-politici ad essi connessi. L'ambito geografico considerato coincide con i seguenti centri che emettevano moneta: Azetium (Rutigliano), Barium (Bari), Butuntum (Bitonto), Caelia (Ceglie del Campo), Grumum (Grumo Appula?), Mateolum (Matera o Mottola?), Neapolis (Polignano a Mare), Rubi (Ruvo) e Silvium-Sidion (Gravina). Si assiste nei centri di Caelia e di Rubi alla produzione di serie in argento; si tratta di piccoli divisionali, dal difficile inquadramento cronologico (fine IV o III sec. a.C.). Le coniazioni enee dei centri di Azetium, Butuntum, Neapolis, Rubi e Silvium sono attestate nel corso del III sec. a.C.; tali emissioni risultano caratterizzate, secondo un uso proprio della monetazione greca, dall'assenza di segno di valore, e dall'adozione di iconografie di ispirazione magno-greca o, frequentemente, di oltresponda adriatica. Con la fine del III e nel corso del II secolo a.C. la zecca di Caelia continua la produzione di moneta, che però appare ora caratterizzata dall'adozione del segno di valore, e dall'inquadrarsi su base metrologica all'interno di un sistema ponderale romano; la medesima scelta viene operata dalle zecche di Barium e Mateolum. Per quanto concerne, infine, la circolazione si può constatare come la moneta emessa dai centri "peuceti" abbia una destinazione d'uso sempre circoscritta all'ambito dei centri di produzione.

283. MOORHEAD, Sam, The British Museum, London, United Kingdom

The Frome Hoard of 52,502 coins - why was it buried?

The Frome Hoard, found in 2010, is the second largest Roman coin hoard found in Britain. More importantly, it was excavated professionally by archaeologists, providing us with a stratification of the coins in the pot. What is intriguing is the latest coins, of Carausius (AD 286-93), were found in the centre of the pot, not at the top. This suggests that the coins were buried in one event. When other factors are taken into account, it does seem that the Frome Hoard was in fact a votive offering, rather than savings intended for later recovery.

284. MORA-SERRANO, Bartolomé, University of Málaga, Spain

'Literatura numismática' en el sur de la Península Ibérica: mitos regionales e historias locales

Asumiendo la lectura iconológica de las iconografías monetarias antiguas, y también las limitaciones técnicas que en muchos casos impiden diseños más complejos, es nuestro propósito insistir en la posibilidad de rastrear ecos de mitos y leyendas en algunos diseños monetales - surhispanos - cuya originalidad no depende siempre de la pericia del grabador de cuños, sino de la formación y e intención del comitente; el 'magistrado' monetar en este caso. Las tradiciones que aluden a la existencia de una posible transmisión literaria de mitos occidentales - u occidentalizados - parecen haber dejado huella en diferentes soportes, incluido el numismático, al fin y al cabo un producto artesanal al servicio de una comunidad cívica que tiene en la comunicación icónica uno de los principales instrumentos para modelar la identidad colectiva. Detrás incluso de amonedaciones modestas en volumen de emisión y resultados técnicos, es posible reconocer la presencia de oligarquías cultas que ordenaron diseños monetarios a su vez inspirados en una literatura mítico-geográfica que en época tardohelenística, eran bien conocidas entre las elites de algunas ciudades surhispanas, como indirectamente viene a indicar la presencia de Asclepiades de Mirlea en la Ulterior-Baetica. La relación de Herakles-Melkart-Hércules con estos territorios es una de las más conocidas, pero su adopción - bajo diferentes formatos - por parte de muchas ciudades puede responder a variados intereses, entre los que el de la debatida cuestión de la 'gaditanización' del sur peninsular debe ser discutida, también desde la óptica romana como generadora de identidades.

285. MORELLI, Anna Lina, Università di Bologna, Italy

Monete di epoca romana repubblicana nella collezione numismatica del Museo Nazionale di Ravenna

La collezione numismatica del Museo Nazionale di Ravenna è stata condizionata e connotata dalle vicende complessive della formazione e dello sviluppo delle istituzioni culturali cittadine, a partire dall'originaria raccolta Classense e fino al riordino intrapreso dalla fine degli anni Settanta del secolo scorso. Dopo la rilettura e l'analisi del nucleo di materiali ascrivibili alle epoche tardoimperiali romana, barbarica e bizantina e della monetazione medievale - a cui appartiene anche un importante rinvenimento locale (ripostiglio di via Luca Longhi) -, l'attenzione è stata ora posta al nucleo delle monete romane repubblicane. La presente comunicazione vuole porre l'accento su questo nucleo assai consistente, individuandone le peculiarità e ponendo le basi per studi ed approfondimenti futuri, con una ricaduta sugli aspetti legati alla circolazione monetaria.

286. MORENO PULIDO, Elena, Universidad de Cádiz, Spain

Influencias século púnicas en la amonedación del Fretum Gaditanum

Las cecas del extremo occidente hispano y mauritano presentan, aún en el momento tardío en el que se desarrollan sus amonedaciones, un marcado carácter púnico. Esta punicidad se proyecta con una intención clara de reflejar hacia el exterior la identidad compartida de esta región, valiéndose de una iconografía cuyos orígenes y paralelos iconográficos más cercanos pueden rastrearse en las amonedaciones de la Sicilia púnica y cartaginesa. Así, los emblemas que compartieron e identificaron a la región extremo occidental, espigas y atunes y los dioses Tanit y Melkart-Heracles se basaron en modelos pictóricos inspirados, en algunos casos directamente, en la amonedación século-púnica, revelando así la existencia de interesantes relaciones comerciales, poblacionales y culturales entre ambos ámbitos púnicos.

287. MORRISSON, Cécile, CNRS, Paris UMR Orient et Méditerranée, France / Dumbarton Oaks, United States of America - **PAPADOPOULOU, Pagona**, Université Aristote, Thessalonique, Greece

Matériaux pour servir à la numismatique byzantine tardive: analyse du "CNG hoard" (DOC 5/1, 15, 147, 149)

Une "collection" - en fait un trésor – de 93 monnaies de bronze byzantines (1204-1341), un Ivan Alexandre et un monnaie de la Horde d'Or parut sur le marché en 1993. Dumbarton Oaks en acheta 16 et la BnF 19 exemplaires. Préparant la publication du volume trois du Catalogue des monnaies byzantines de la BnF, nous présentons ici l'inventaire détaillé de ce lot. Il vient s'ajouter aux rares dépôts connus de bronzes du milieu du XIV^e siècle (Prilep, Longuet, Serres, Pella) mais s'en distingue par le mélange d'espèces des deux ateliers de l'Empire: Constantinople et Thessalonique.

288. MUESELER, Wilhelm, Dr. Busso Peus Nachfolger, Frankfurt am Main, Germany

Lycian coinage during the fifth and fourth century BC

In the course of the last three decades a number of important private collections focussed on archaic and classical coins from Lycia have been formed within Germany. These collections assemble material that was found scattered in various auction catalogues and sales lists all over the world. They contain not only many well known and documented types but also a number of new and highly significant types and variants, which are unpublished yet. A comprehensive publication of the whole material is in the course of preparation and will hopefully have appeared by the time of the congress. In the case of Lycia coins are among the most important and at times even the only valid source for the history of that region, a true melting-pot of indigenous traditions with Greek and Iranian influences, during the fifth and the early fourth century BC. From cross-referencing iconographic patterns with the combination of personal names, geographical indications and specific monograms on Lycian coins important information on the political development of the region in the course and the immediate aftermath of the Peloponnesian war can be gleaned. With the introduction of some selected examples, published and unpublished, the author is willing to demonstrate once more the indispensable role of numismatics as a witness to the history of regions otherwise poorly covered by the literary historiographical tradition.

289. MUÑOZ-PANDO, Roberto Gerardo, Puerto Rico

Contramarcas encontradas en monedas de cuatro maravedíes de los depósitos de National Parks Service y Casa Margarida en San Juan, Puerto Rico

Puerto Rico's numismatic history is very rich and complex. Coins are an important find in archaeological digs. Several key counterstamps and other counterstamps were found in coins stored at the National Park Service (NPS) and Casa Margarida deposits in San Juan, Puerto Rico. We will describe the counterstamps found. We will present analysis of the frequency in which they appear and other pertinent statistical data. We are sure that further investigations are necessary to gather more information about this finding.

290. MUNTEANU, Lucian, Romanian Academy, Iași branch, Iași, Romania

Roman coin finds in the hinterland of Dacia and Moesia Inferior provinces

The present paper focuses on the 2nd and 3rd century coin finds from the north of the Lower Danube territories remained outside the Roman conquest (east, south and west of the Carpathian Mountains). An extensive analysis of a large numismatic database containing numerous hoards and isolated finds has been done, both in terms of composition and chronological structure. Particular and common features have occurred in the coin finds from different territories north of the Lower Danube and thus they have lead to the definition of regional monetary patterns. The characteristics of these patterns were generated by various factors, such as the distinct political and economic development of the local tribes ("free Dacians", Sarmatians, Germans), or their differentiated relationships with the Empire. In the last case it was important to identify the ways of penetration for the Roman coins outside the *limes*, through economic activities or as result of non-commercial relations (*stipendia*, military payments, tribute, robberies, ransoming of captives, diplomatic gifts). The chronology and the functions of Roman currency in the hinterland of the Dacia and Moesia Inferior provinces were discussed by correlating various sources of information: numismatic (the presence of *subaerati denarii* and barbarous imitations), archaeological (pottery and cans which housed coins, other artefacts associated with hoards, archaeological contexts of settlements and cemeteries) and literary (ancient authors). (This research was funded by the "MINERVA - Cooperation for elite career in doctoral and post-doctoral

research", POSDRU/159/1.5/S/137832, financed from the European Social Fund by the Operational Programme Human Resources Development 2007-2013).

291. MURGAN, Andreas, Goethe-Universität, Frankfurt am Main, Germany

Pre(?)monetary objects in ancient Italy and Sicily: Lumps and bars in context

Lumps and bars made out of different copper alloys are usually considered to have premonetary functions, such as being a holder of intrinsic value. Frequently, further analysis involving a detailed examination of their meaning does not take place, as their identification is seemingly satisfactory. These lumps and bars appear in the archaeological record over a long period of time, almost completely spanning the first millennium B.C. Furthermore, they are spread over long distances, from Italy to Sicily and beyond, as hoards in the former Yugoslavia prove. Their contexts clearly differ from each other, as they can be found in hoards, graves and sanctuaries, indicating both profane and sacral use. All of these contexts reveal interesting aspects concerning how ancient people used (pre)monetary objects, with functions and meanings oscillating between the extremes of profane money and ritual dedication. This paper addresses this topic by analysing selected find spots that encompass a variety of archaeological contexts in order to obtain a better understanding of how and why people deposited objects of value. Through this, we may trace how ancient people dealt with value(s) on a profane and ritual level. This approach reveals similarities and differences over wide regions, as well as any aspects of continuity and discontinuity over long periods of time.

292. MYZGIN, Kyrylo, Karazin University, Kharkiv, Ukraine

Finds of Roman Republican Coins on the Territory of Ukraine and Belarus (poster)

Among the finds of Roman coins on the territory of the Eastern European Barbaricum Republican coins are very rare. In numismatic literature only 22 single finds and one hoard (27 coins and 8 barbarian imitations) from Ukraine and 7 single finds from the territory of Belarus have been published. Recently, the number of new items increased significantly due metal detectorists finds. However, very rarely these coins have been recorded within an exact location and with an information about archaeological context. All Roman Republican coins which have been found on the territory of the Eastern European Barbaricum were *denarii* from the 1st century BC. The problem of influx of Republican coins into these areas is one of the most controversial issues. Most of the coins have been found in the area of Przeworsk culture and should be certainly associated with it. The hoard from Pochapa was also found within this area. However, some Republican coins have been found far beyond the Przeworsk culture area, in the territories of Zarubynets, Poyaneshti-Lukashevka and Lipitsa cultures. Perhaps these coins came to these areas together with other Roman imports. Interesting coin (*denarius* of Lucius Cesium) have been found in the area of Chernyakhiv settlement (near Staryi Merchyk, Eastern Ukraine). Perhaps this coin, as well as other coins of the Early Empire, came to the territory of Chernyakhiv culture, together with *denarii* of the 1st-2nd centuries AD from Central European Barbaricum.

293. NAPOLITANO, Maria Luisa, Università "Federico II", Napoli, Italy

Hubertus Goltzius, totius antiquitatis restaurator: numismatica e storia in Sicilia et Magna Graecia (1576)

La produzione di Hubertus Goltzius è il primo esempio di approccio scientifico alla numismatica antica nella prospettiva ampia dell'*antiquitatis restaurator*. L'opera *Sicilia et Magna Graecia* costituisce il primo e unico volume di un progetto dedicato alla monetazione e alla storia dei Greci, in un momento in cui è la romanità e non la grecità a costituire tematica gradita e sollecitata, soprattutto dall'Impero e dal Papato. Nel titolo, G. esprime la separazione già antica della Sicilia greca dalla *Megale Hellas*, cui egli affianca la teorizzazione della priorità insediativa dei Sicani, antenati della stirpe degli Asburgo di Spagna e dello stesso Filippo II cui l'opera è dedicata, priorità sostanziata dalla *auctoritas* tucididea. La sezione dedicata alla Sicilia apre il volume con le ricche Tavole numismatiche e le numerose pagine dedicate alla ricostruzione della storia delle città antiche dell'isola, in primis Siracusa ma anche le località elime e puniche, la cui sequenza risponde a criteri di contiguità, nella presentazione di un itinerario culturale coerente che si dispiega per l'umanista lettore-viator. Nella trasmissione della memoria del passato le monete rappresentano documenti di un mondo scomparso, da ri-conoscere e da connettere con le fonti letterarie, raccordo tra passato e presente. Anche nella sezione dedicata all'Italia greca, le monete si confrontano con gli *auctores*, costituendo 'segni' del *mos graecum*, sottratti dall'intervento dell'*historicus* al silenzio oscuro dei secoli e restituiti alla memoria. Puntuali risultano le indicazioni tecniche di tondelli e metalli; costante la valorizzazione, di una originalità consapevole, delle tipologie fitomorfe e teriomorfe, fino ad allora trascurate.

294. NASSAR, Magdi Ali Mohamed, Italy

Il ritratto fisionomico realistico sulla monetazione medievale italiana

Chiunque si sia avvicinato allo studio della ritrattistica medievale, anche al di fuori dell'ambito numismatico, ne conosce i connotati rappresentativi, che si configurano in una dimensione idealizzata, che rappresenta la realtà in maniera schematica e stilizzata. In effetti la rappresentazione medievale, non solo del volto umano, ma anche delle città, dei paesaggi e degli oggetti segue preponderatamente questa impronta ideologica, secondo la quale la realtà non deve essere rappresentata per come è, ma per come l'individuo la percepisce e la riconosce, affinché chi vede la rappresentazione sia in grado di individuare il soggetto ed i valori che ad esso sono legati. In questo studio analizzeremo quei casi, tutt'altro che comuni, in cui, invece, viene utilizzata una rappresentazione diretta della realtà; tema in parte trascurato nel passato per la sua complessità, con l'obiettivo di proporre alcuni casi di studio, partendo dalla prima rappresentazione fisionomica del medioevo, che è quella del Volto Santo di Lucca, nel quale l'incisore ricalca fedelmente il volto del Cristo mediante il modello della celebre reliquia che ne rappresenta, agli occhi del credente, la rappresentazione fedelissima. Analizzeremo vari casi in cui il ritratto monetale presenta connotati anomali rispetto alla rappresentazione usuale di un volto standard, che di per sé rappresentano la possibilità che l'incisore abbia avuto un modello effettivo e, attraverso il confronto con le altre rappresentazioni coeve del soggetto, verificheremo la realistica delle rappresentazioni, cercando di motivarne l'adozione anche attraverso dei collegamenti alle arti coeve.

295. NAYLOR, John, Ashmolean Museum, University of Oxford, United Kingdom

The use of gold coinage in 6th and 7th-century burials in England

Gold *solidi* and *tremisses* are a regular, if minor, element of furnished burials in Early Anglo-Saxon England, dating to the 6th and 7th centuries AD. Those from famous sites such as the royal boat burial excavated at Sutton Hoo have received much attention and discussion of the possible motives behind their deposition but most are barely considered beyond the catalogues of finds accompanying excavation reports. Indeed, even for the former, it has been some years since these publications and there is considerable scope for re-examination within the prism of current evidence. The inclusion of early-medieval gold coinage in burials has great potential to provide us with evidence for contemporary attitudes to, and use of, coinage in a formative period of monetisation in early-medieval England. The evidence from these burials will be examined at three levels: in comparison to geographical distributions and composition of the overall corpus of coin finds; the treatment of the coin (looping, piercing or without modification) and its association with other objects and the body; and its place in burial chronology (heirlooms and current currency). Interpretation will be framed within broader debates in early medieval scholarship concerning the networks of international communication and trade which were intensifying during the 6th and 7th centuries and the concurrent emergence of a maritime cultural identity around the North Sea littoral.

296. NAYMARK, Aleksandr, Hofstra University, United States of America

International silver and local copper in Sogdian numismatics

From the end of the 6th to the 8th century Sogdian mints producing copper increased in number. At the beginning of this period we know only the coinages of Samarqand, Nakhshab, Bukhara and, possibly, Vardana. In the 8th century there are coins of Samarkand, Ishtihan, Panjikant, two non-localized massive coinages in Samarqand Soghd ("Ramchitak" and "Samitan") and episodic issues of other places. Further to the east and north were the mints of Ustrushana, Khodzhen and a principality situated in the area of Ura-tiube. In 720s the mint of Bukharakhudas moved to Varakhsha and by 750 the Arabs organized their coinage in Bukhara. In the South were the mints of Kesh, Nakhshab and two coinages that have not been localized yet. Designs on Sogdian coppers changed, as the legends with different titles and names testify, from reign to reign. All that time Sogdian silver drachms followed a single pattern - the design of the drachms of the long gone Sasanian ruler Varahran - and did not alter the legend even when the minting of this series moved from Bukhara to Samarqand. This strange discrepancy can be explained by the different functions of silver and copper coinage in local circulation: silver was serving all-Sogdian and international trade and the stability of its design was meant to serve as the visual guarantee of the reliability of these coins, while the copper was used mostly locally and thus could be used as the vehicle of political propaganda by rulers of different principalities.

297. NICK, Michael, Swiss Inventory of Coin Finds, Berne, Switzerland

Celtic Coin Finds from Switzerland – The recent volume of the Swiss Inventory of Coin Finds (poster)

The most recent volume of our monograph series comes up to a long-term desideratum: it is the first overview of all accessible Celtic coin finds from Switzerland. In addition to the detailed catalogue it also gives an interpretation of Celtic coin circulation on a broad basis of material. The assessment showed numerous aspects of the diverse coin use in regional as well as chronological respect. The earliest phase (from c. 250 B.C.) is defined by the use of gold coins and, on a smaller scale, silver obols from mainly ritual contexts. After c. 150 B.C. the time of the "*oppida*" and ports of trade go along with a differentiation of the monetary system and the introduction of potin coins and the *quinarius*. Since the early 1st century B.C. a change of currency can be observed once again. So far the potin coins were dominant among the settlement finds but then the silver *quinarius* took over. In eastern and south-eastern Switzerland, though, coin circulation was still rudimentarily developed or non-existent. The canton of Valais shows a distinctive feature. Here mainly drachms of the Veragri were in use. Because they primarily stem from ritual contexts the question arises, whether there was a coin circulation for economic purposes at all. The last part of the volume is dedicated to the question if and for how long Celtic coins were still circulating after the Roman conquest.

298. NICOLAE, Eugen, Institut d'Archéologie "Vasile Pârvan" de l'Académie Roumaine, Bucarest, Romania

L'atelier monétaire de l'époque de la Horde d'Or de la Ville Neuve (Yangi-Şehr / Şehr al-cedid)

L'auteur présente un bilan des recherches sur l'activité de l'atelier monétaire de l'époque de la Horde d'Or de la Ville Neuve (Yangi-Şehr / Şehr al-cedid), localisé à Orheiul Vechi (Trebujeni, département d'Orhei, République de Moldavie). En 1977, S.A. Janina enregistrait des émissions en argent des années de l'hégire 765-767 et 769. Ultérieurement, on a mis en évidence des pièces des années de l'hégire 764, 768 et 770, donc l'activité de l'atelier s'inscrit dans l'intervalle 1362-1369 apr. J.-C. L'analyse des inscriptions monétaires a permis d'observer l'évolution depuis les pièces frappées pour le khan Abdallah à celles anonymes et avec le titre şeyh (cheikh), ce qui reflète le début du processus de la séparation de la Moldavie du sud-est de la Horde d'Or. En ce qui concerne les pièces en cuivre, les recherches récentes n'ont pas apporté des nouveautés typologiques. Il a été confirmé que dans beaucoup de cas il s'agit de pièces du type à la rosace de l'atelier de Saray al-cedid surfrappées. On considère qu'elles ont été frappées par le gouverneur local après le départ du khan Abdallah. L'atelier a cessé son activité en 1369, lorsque les garnisons tatares et les communautés orientales installées par le khan Abdallah ont été attaquées et chassées de la région.

299. NICOLAU KORMIKIARI, Maria Cristina, Museum of Archaeology and Ethnology, University of São Paulo, Brazil

How monetarized was Berber society in antiquity?

The aim of this paper is to discuss, through the analysis of circulation and iconography, the extent to which Ancient Berbers, more specifically Numidians, monetarized their society between the end of the 3rd century BC and the beginning of the 1st century AD. This span of time encloses a very disturbed period, because it contains the end of Punic domination of the area, including the fall of Carthage, the ascension of the Berber kings, and the first movements of dominion by the Romans, with the annexation of lands, turned into provinces.

300. NICOT, Rodolphe, Éveha, France

Fake monetary molds and fake currency in Lyon: new discovery (poster)

An excavation realized on the Fourvière hill in Lyon allowed to know the evolution of a part of the *insula* since the Augustan period until the dawn of late antiquity. In one of the shops / workshops open to the street, cellar pit delivered a batch of eleven monetary molds clay and a fake Trajan's denier. This discovery presents a double originality: this is the first time that a Lyon monetary molds bears the imprint of the Antonine (Trajan, Hadrian, Marc-Aurèle and Faustine the second). Moreover, only two valves out of eleven seem to bear an official denier stamp. The unusual nature of this discovery and especially its place of discovery led to wonder about the activity practiced in this shop set on the side of the street. Would it be a simple link of an operative chain more complex? The molds were placed at the bottom of a cellar pit, sealed by ceramic dating from the third century near a built fire place. No track of a metallurgical activity has been spotted (pit or shop). On the other side, the pit concealed a fake Trajan's denier, encouraging to consider that the complete operating chain of fake mintage have taken place

in this building. Analysis by Maryse Blet-Lemarquant in Orléans reveals a composition to 95 percent copper which brings it closer to *aureliani* imitation, Postumus discoveries in both treasures of Rocquencourt and Mers-les-Bains and which the workshop coinage would be located in Chateaubleau.

301. NOLLÉ, Johannes, German Archaeological Institute, Germany

Founded by Zeus – often overlooked local lore on coin images

All of us know Apollon's importance in the founding traditions of many Greek cities. As a lot of cities believed or wanted to make believe that their origins could be traced back to an oracle of Apollon, they depicted this god's head or his tripod on their coins. But it should not be forgotten that also Zeus was very often propagated as a founder god. In his case, oracles don't play a role, but his eagle, which was sent by him to show a suitable place for the founding of a new city to a king or any other type of founder. In most of these founding stories the human founder, who is an instrument of Zeus, was sacrificing, when Zeus' eagle came and robbed a bone from the altar. Holding a bone in its claws the eagle flew directly to the place where by the will of the god a new city should be established. Frequently coin images allude to founding stories of this type and show the eagle with a bone in his claws, but very often numismatists have overlooked this very important detail and haven't understood the real meaning of the eagle image.

302. NOVAK, Vlastimil, National Museum - Naprstek Museum, Prague, Czech Republic

Islamic silver in the newly discovered hoard dated back to the 10th century from central Moravia, the Czech Republic

In 2009-2013, an early medieval silver hoard was found via metal detecting activities in Kojetín-Popůvky in central Moravia, the Czech Republic. It consists of 48 complete west-European deniers and 68 fragments of theirs, 134 fragments of Islamic coins and one complete dirham, plus 9 fragments of silver jewelry and one small silver ingot. The coin from Strasbourg (Widerold) points to the burial date *post quem* - AD 991. The denier selection is represented by coins from Bavaria, Pavia, Cologne, Magdeburg, Konstanz, Dortmund, Strasbourg and Saxony, and specimens of the cross and Otto-Adelheid type. The coins for the Islamic fragments were struck under the Abbasids, Samanids, Buyids and Ziyarids in the following mints: Amul, Bukhara, al-Shash, Jurjan, Isbahan, al-Muhammadiya, Madinat al-Salam and Farwan. There are also several fragments of coins copying the Samanid prototypes (the Volga Bulgars). In Moravia and Silesia at the break of the 10th and 11th centuries, practice of transactions in weighed metal was accepted, and there was a relatively small amount of silver in local circulation. All registered hoards of that period there represent the typical hacksilver with fragments of Islamic coins, very similar to those ones in the related Polish territory (the Upper Oder region, the southern segment of the Oder-Vistula trade basin).

303. ORTIZ CORDOBA, José, Universidad de Granada, Spain

A set of coins from Late Antiquity found in the town of Ronda (Malaga) (poster)

In this proposal we present a set of more than 150 coins of Late Antiquity found during the excavations carried out in the urban area of the city of Ronda, located in the South of Spain, at the beginning of the decade of the 2000. The set was found under a series of landslides which have been dated at the beginning of the V century AD and which would correspond to an urban villa of the Low Roman Empire. The set in question shows a series of coins ranging from the reign of the Emperor Valentinian to the emperors Honorius and Arcadius and where we can see a clear predominance of the Eastern mints of the Empire. The time frame in which you can place these coins coincides with a time of great difficulty and profound changes in all the structures of the Empire. In this way, the study of this set of coins will provide new data for the knowledge of late Antiquity in the area of Ronda and its region, historical period poorly documented in the city so far, and it will help us, in addition, to complete knowledge about the transformations experienced by the region in the final years of the Roman Empire.

304. OTERO MORÁN, Paloma, Museo Arqueológico Nacional, Madrid, Spain - **GRAÑEDA MIÑÓN, Paula**, Museo Arqueológico Nacional, Madrid, Spain - **CRUZ MATEO, Montserrat**, Museo Arqueológico Nacional, Madrid, Spain

La nueva exposición y Gabinete Numismático del Museo Arqueológico Nacional (Madrid) (only in the Proceedings)

Las obras de remodelación del Museo Arqueológico Nacional (2007-2014) han supuesto un vuelco en la forma de preservar y mostrar las colecciones numismáticas de sus fondos. La modernización de las instalaciones y la total renovación del programa y del montaje museográfico han afectado radicalmente a las aproximadamente 300.000 piezas numismáticas que conserva la institución. La renovación del edificio ha dado pie a la construcción de un Gabinete Numismático y una cámara acorazada más amplios y con mayores posibilidades funcionales, así como de salas de reserva que han permitido reubicar aquella parte de los fondos que, por su volumen o características, no encontraban un lugar apropiado en un monetario tradicional. El traslado desde el antiguo gabinete fue una tarea meticulosa y delicada, en la que se hizo un especial hincapié en garantizar en todo momento el control sobre los bienes culturales y sus condiciones de conservación. El nuevo programa museográfico del MAN ha supuesto el fin de una situación anómala en la trayectoria del museo en los últimos sesenta años: la escasísima exhibición al público de los fondos numismáticos. Desde 1951, por distintas razones, no hubo una exposición permanente a la altura de la relevancia de las colecciones. En el nuevo montaje, las colecciones numismáticas recuperan, por un lado, un espacio propio - el área monográfica La moneda, algo más que dinero - y, por otro, se integran de forma natural en el discurso histórico del museo, reconstruyendo así, junto al resto de objetos arqueológicos, la “gran historia” y la vida cotidiana.

305. PAFFORD, Isabelle, San Francisco State University, United States of America

Coins from the Morgantina Thesaios – Reconsidered

In 1958 American archaeologists at Morgantina uncovered the upper and lower blocks of a stone offering box (*thesaios*) within a building now referred to as the Central Sanctuary. The *thesaios* contained 154 bronze coins, which had been “scattered” into an earth fill within the cavity of the *thesaios* (AJA 1959, 168-9). These coins were initially dated from the early 3rd c. B.C.E. to the mid 2nd c. B.C.E., which suggested to the excavators that this material had accumulated in the sanctuary over an extended period and had then been hidden during a time of unrest, such as the Sicilian slave revolts of 138 B.C.E. However, since final publication of the coins in Morgantina II, significant scholarly progress in numismatics and archaeology demand that we re-interpret the material from this deposit. Caccamo Caltabiano (NAC 1985, 159-169) has convincingly related the coins of ‘*Hispanorum*’, Kaminski (JdI 1991, 63-181) has published an archaeological typology of stone *thesaios*, and Edlund-Berry has given a preliminary report on the ritual/chthonic context of the Central Sanctuary. Additionally, comparison of cult activity in this sanctuary with patterns of coin use in other sanctuaries, as understood from the inscriptional evidence of Greek sacred law (Pafford 2013), suggests that the Morgantina *thesaios* had been a significant cult object before the reorganization of the sanctuary which followed the sack of the city by Rome in 211 B.C.E. This paper will present options for re-dating and reinterpreting this important deposit in light of such recent scholarship.

306. PAGHAVA, Irakli, Ilia State University, Georgia - **TURKIA, Severiane,** Georgia

Between Ja'farids and Bagratids: The Last Monetary Issues of Muslim Tiflis in the Name of al-Mustazhir (1094-1118)

Our objective is to publish previously unknown coins of two major types, being commonly discovered on the Mtkvari riverbed (territory of ancient Tiflis, center of Arab dominions in Georgia): 1) Obverse: “al-Mustazhir bi’llah” (‘Abbasid caliph, 1094-1118) in Kufic script arranged in a square, within square, fragments of legends in the outer segments; Reverse: “al-Sultan al-mu’azzam” in Kufic script (a title of the contemporary Great Seljuk sultan?) arranged similarly, within linear circle; illegible marginal legend; 2) Obverse, Kufic legend in 3 lines: “Muḥammad” legible on some specimens (probably Muḥammad b. Malik Shah, ruler of Arran from 1092, Great Seljuk sultan in 1105-1118), “al-Mustazhir”, illegible word; Reverse: Hexagram with central dot, within complex circle; illegible marginal legend. Flans of irregular shape, size and thickness, weight variation for correspondingly type 1 and type 2 (16 and 17 specimens studied): 0.66-4.28 and 1.01-8.13 g. The extant specimens preserved no mint name, but we attribute both groups to Tiflis based on the finds’ location (virtually no coins discovered elsewhere; tens retrieved from the Mtkvari riverbed, a number exceeding the finds of the early issues of the Bagratid Georgian kings of the early 12th c.). The coins were minted in 1094-1118. These series fill the numismatic gap between the last Ja’farid issues (Ja’farids ruled in Tiflis till 1180s) and the first Arabic language Tiflis coppers of Davit IV Bagratid (captured Tiflis from Muslims in 1122). They testify to the local monetary activities and political dependency on Great Seljuks.

307. PANAGOPOULOU, Katarina, University of Crete, Greece

Hellenistic Macedonia revisited: redating the ‘Later Macedonian’ Alexander tetradrachm issues

The political turmoil of the so-called interregnum in post-Alexander III Macedonia between 290 BC and the accession of the Hellenistic king Antigonos Gonatas to the Macedonian throne is reflected numismatically upon the complex pattern of the posthumous Alexander silver tetradrachms, which were assigned to this period by R.W. Mathisen in the 1980s. Mathisen,

followed by Price, distinguished eight main 'Macedonian' groups through the control marks which appeared on the reverse of the respective posthumous Alexander tetradrachms ('Omikron-kappa', 'Triton', 'Mu', 'grapes', 'Xi', 'helmet', 'bipennis', 'Monogram') and dated them until 272/1 BC, i.e. the introduction by Gonatas of his individual coin types. Our redating of the initiation of the first of the two individual Antigoniid silver coin types, the Pan head tetradrachms, to 265/4 BC in our die study of the individual Antigoniid precious metal coinage raises questions, such as: may any of these 'later Macedonian' Alexander tetradrachm groups be shifted through the hoard evidence to a later date (which groups, to which dates)? Given as well the limited size of individual Antigoniid issues, as opposed to the intense military activities of this period, may one even argue about the continuous or periodical striking of these posthumous Alexander groups alongside the Antigoniid individual coin types, possibly until the reign of Philip V? What do control marks on these Alexanders and on the new Pan tetradrachms tell us about the restructuring of Macedonian royal issues in the early Antigoniid period?

308. PAPAETHYMIU, Eleni, Bank of Greece, Greece

Une mise à jour du monnayage d'Édessa de Macédoine (quelques vingt ans plus tard)

Pour la préparation de ma thèse de doctorat sur le monnayage provinciale d'Édessa de Macédoine, publiée en 2002, j'avais arrêté le rassemblement du matériel en 1991. Depuis quelques nouvelles pièces de monnaie, comme c'est normal, ont été publiées et certaines sont apparues à des ventes aux enchères. La plupart des nouveaux exemplaires sont issus de coins connus et viennent se rajouter au catalogue publié. Quelques pièces, issues de nouveaux coins de droit ou de revers, soit complètent les séries et les groupes déjà connues soit font la liaison entre les séries de l'étude, en perfectionnant la succession des coins de séries proposée. Une pièce, apparue dans une vente publique et dorénavant dans une collection privée, grâce à son état de conservation, identifie le dieu, représenté sur le revers de l'unique monnaie sans portrait impérial de la cité, comme Poséidon (un des dieux proposés pour cette représentation dans ma publication). Deux autres pièces inédites jusqu'à présent, apparues également dans des ventes publiques et dorénavant dans une collection privée, représentent un nouveau type de revers. La première, un double *assarion* du règne de Caracalla, représente un tout à nouveau type, un personnage féminin entre deux colonnes surmontées de dieu-rivières. La deuxième, un demi-*assarion* de Philippe l'Arabe, dénomination inconnue jusqu'à présent pour cet empereur, reprend un type de Caracalla avec la représentation d'un bouc s'appuyant sur la partie supérieure d'une vigne.

309. PARDINI, Giacomo, Università di Salerno, Italy - FERRANDES, Antonio F., Università di Roma 'La Sapienza', Italy

Tra Repubblica e Impero. Stratigrafie, contesti e moneta a Roma: materiali editi e nuove acquisizioni

La tarda età repubblicana e la prima età imperiale rappresentano ancora oggi due momenti poco noti a Roma dal punto di vista della circolazione monetale: si tratta di una grave lacuna e la documentazione finora edita non è stata dirimente per comprendere la reale portata e il ruolo svolto dal numerario attestato. Recenti scavi hanno permesso il recupero di nuovi contesti, datati tra il I secolo a.C. ed il 64 d.C., che possono fornire significativi indizi per una migliore comprensione dei problemi citati. Una prima serie di nuclei di materiale è stata individuata durante le indagini della Soprintendenza Archeologica di Roma nell'area degli *Horti Lamiani* (Esquilino) e presso Villa Medici (Pincio). Un secondo gruppo proviene invece dalle ricerche condotte dalla Sapienza-Università di Roma nell'area della *Meta Sudans* e sulle pendici nord-orientali del Palatino. L'analisi di queste stratigrafie e il riesame dell'edito ha comportato innanzitutto una valutazione complessiva dei contesti e dei rapporti esistenti tra le diverse categorie/classi del materiale. Si è valutata così l'incidenza dei residui sul campione generale e, di conseguenza, l'affidabilità dei singoli nuclei di oggetti nell'interpretazione dei temi accennati. È stato in questo modo possibile precisare il ruolo svolto dalla moneta all'interno dei singoli contesti e le funzioni, l'uso e i modi della circolazione della stessa all'interno dell'*Urbs*. L'analisi contestuale di stratigrafie e materiali ha pertanto consentito di evidenziare il significato dei rinvenimenti monetali ed ha fornito nuovi spunti di riflessione sulle dinamiche socio-economiche relative a uno dei periodi più vivaci della storia del mondo antico.

310. PARIS, Elodie, Université Montpellier III, France

Circulation monétaire en Languedoc central au Deuxième Âge du Fer (VIe- Ier siècles av. J.-C.): comparaisons diachroniques des agglomérations de Béziers, Magalas et Agde

Le faciès culturel du Languedoc central s'est construit autour de la vallée de l'Hérault, principal moyen de communication reliant la Méditerranée à l'arrière-pays languedocien. Notre zone d'étude est située à la limite entre Languedoc occidental et Languedoc central matérialisée par l'Orb. Les échanges y furent dynamiques très tôt (VIIe siècle avant J.-C. pour les premiers)

et entraînèrent le développement des habitats pendant tout le Deuxième Âge du Fer. Nous nous intéressons ici à trois d'entre eux, devenus de véritables agglomérations protohistoriques en prenant activement part au commerce de manières différentes: Béziers, relais commercial de la vallée de l'Orb; Magalas, important habitat de l'arrière-pays et enfin Agde, colonie massaliète à l'embouchure de l'Hérault. La précocité de leur développement a incité les chercheurs à voir, dans les cités de Béziers et Magalas, la mainmise de Massalia, à l'image de la colonie d'Agathè. Grâce à la numismatique, peut-on déterminer la nature et le statut de ces trois occupations du Deuxième Âge du Fer? En comparant les faciès monétaires de ces dernières d'un point de vue diachronique, que pouvons-nous observer sur l'évolution des échanges? C'est ce que nous tentons de faire en nous appuyant sur un corpus monétaire que le matériel archéologique et/ou le contexte de découverte nous ont permis de dater.

311. PARISOT-SILLON, Charles, IRAMAT Centre Ernest-Babelon - Université d'Orléans / CNRS, France – **CORSI, Jacopo**, Università di Torino / INFN Sezione di Torino, Italy – **SUSPÈNE, Arnaud**, IRAMAT Centre Ernest-Babelon Université d'Orléans / CNRS, France - **SARAH, Guillaume**, IRAMAT Centre Ernest-Babelon Université d'Orléans / CNRS, France

Ancient silver coinages between the Rhone and Po rivers: new data from elemental analyses

Contemporary national boundaries have often been an obstacle to archaeological and numismatic research in the previous decades. The aim of this project, funded by a grant from the French-Italian University, is to assess the nature of the interactions between the Massilian, Celtic and Roman Republican silver coinages circulating in the Southern and coastal French-Italian Alps during the IIIrd and IInd centuries BC. The focus is set on non-destructive elemental analyses, performed mainly with LA-ICP-MS, on a sample of several dozens of coins. This technique provides bulk compositional measurements, and it allows for the detection of multiple trace elements, which can in turn be used to isolate a silver/copper alloy's specific elemental signature. The main issues dealt with include the characterization of the silver ores used to strike the heavy drachms of Massalia [1], as compared with that of Celtic imitative coins (Massa α type [2]); the identification of trends in the composition of coins throughout the period, in relation with the extent of their circulation; and the evaluation of metrological relationships between Massilian light drachms, Celtic coins and Roman *victoriati*, based on the study of average weights and fineness. The results simultaneously emphasize the switching reference from Massalia to Rome in this region and the active, self-imposed monetary strategies adopted by Celtic tribes. References [1] J.-N. Barrandon and C. Brenot, *Recherches sur le monnayage d'argent de Marseille*, MEFRA, 1978, 90, pp. 637–668. [2] A. Pautasso, *Le monete preromane dell'Italia settentrionale*, Sibirium, 1966, 7, pp. 1-162.

312. Removed.

313. PASZKIEWICZ, Borys, University of Wrocław, Poland

Lusatian seigniorial coinage of Żary and Przewóz

The seignior of Żary (Lusatian: Żarów) belonged to Lower Lusatia, but, thanks to its situation just at the Silesian border, it took a political form close to a Silesian duchy. This also applies to coinage. Scholars guess that anonymous bracteates were struck in Żary as early as in the mid-thirteenth century, but these attributions are disputable. In collections and finds rare coins of Seignior John de Biberstein III of Żary (1360–1424) have been recorded, struck around the turn of the fourteenth and fifteenth centuries. A unique, half-century older double-sided penny of Ulrich de Pack III (1329/1340–1355), was also published by Emil Bahrfeldt. New discoveries in a certain church near Żary, not only increased a number of known coins but also revealed a long series of pennies struck in Żary by the Packs, starting from Ulrich I (1280–97), through Ulrich II (1297–1329/40) to Ulrich III. One cannot say about a continuity in the Żary coinage since it was a series of episodes rather than a continuous activity. This proves without doubts, however, that a grand seigneur in Lusatia was able to strike his own coins without any special privilege. One more type of pennies was probably struck by the Packs' relative and, partly, their successor, Albert de Hakenborn II in Przewóz (1350?–1359/65). The same church excavation revealed also a new heller type of the Silesian duchy of Żagań from the early fifteenth century.

314. PAVLOVIC, Ana, University of Zagreb, Croatia

The hoards from Trijebanj and Bjelovar and analogous numismatic finds from the western Balkan region

The paper discusses the coin hoards of Constantinian period from the west Balkans area. The focus will be on the hoard from Trijebanj, found in 1936 at the site of Crkvine near Trijebanj (Stolac county, Bosnia and Herzegovina), of 11072 pieces, and

the hoard from Bjelovar in Croatia, found in 2006, of 3959 pieces in total. These two hoards are very similar, with a major part of both consisting of bronzes issued from 308 to 313, the period of intensive dynastic conflicts among Diocletian's and Galerius' successors. Numismatic analysis offers the possibility to study these hoards alongside other coin hoards of Constantinian period found in the west Balkans region – and beyond – comparable to them, more precisely, 15 hoards found in the present-day Serbia, Bulgaria and Greece. However, none of these is a close match to the two hoards discussed above. Most of these hoards are either unpublished or lost, which makes the analysis of the two hoards an important contribution to our understanding of coin circulation and distribution in the Roman Imperial period. A specific nature of the hoards from Trijebanj and Bjelovar, representing rare specimens of hoards of this type of which we have some insight, was also proved.

315. PAVLOVSKA, Eftimija, Museum of the National Bank of the Republic of Macedonia

A Part of a Rare 'Paeonian' Hoard from Macedonia

This part of a hoard is kept in the Museum of the Macedonian Central Bank. It comprises of nine Hellenistic silver coins - six are coins of the Paeonian king Audoleon (4 tetradrachms, 1 didrachm and 1 drachm), two are coins of Alexander the Great (a tetradrachm and a drachm) and one coin (a tetradrachm) is of Lysimachus. It is said that this chance find occurred in the East part of the Republic of Macedonia, in the vicinity of Sveti Nikole, i.e. on the territory of the Ancient Paeonian Kingdom. Single finds and especially hoards containing coins of Audoleon are very rare; it is interesting, as well, that this hoard contains one exceedingly rare denomination of Audoleon - a didrachm. Some remarks and parallels will be made with other hoards containing Paeonian coins in an attempt to discuss the historical and political context that eventually caused its deposition.

316. PEITLER, Karl, Universalmuseum Joanneum, Graz, Austria

The coin hoard from the Poetschenwand. A new third century coin hoard from the Roman province of Noricum

In the autumn of 2012 in the Ausseerland, which is located in the northwestern part of the Austrian Federal State of Styria, a new coin hoard from the Roman period was recovered. The coins were found at the Poetschenwand, a rock formation which extends from Styria to Upper Austria between the mountains Sandling and Sarstein just north of the Poetschen-Pass. The hoard which its 144 pieces contains only one denomination, namely antoninians, which were issued mainly under the sole reign of Gallienus (AD 260–268) and the reign of Claudius II Gothicus (AD 268–270). Only a few coins of the hoard were struck under the joint reign of Gallienus and Valerianus I (AD 253–260) and the short reign of Quintillus (AD 270). The hoard closes with four early coins of Aurelianus (AD 270–275) and contains no neo-antoninians which were introduced by this emperor. The talk focuses on the following issues that arise in connection with the hoard: the dates of the coins and their distribution among the rulers responsible for the minting; the conservation status of the coins; the place of deposit; the date of burial, the historical background. Coin hoards from Noricum of similar dating and composition will also be taken into account.

317. PELLÉ, Richard, INRAP, France - **FRANGIN, Elsa**, INRAP, France - **CHAPON, Philippe**, INRAP, France

I piccoli bronzi tardivi di Massalia: un uso estremo o delle coniazioni recenti; l'esempio di due lotti trovati in scavo

Nel 2013, due scavi archeologici eseguiti nel comune di Gémenos (Marsiglia, Francia) hanno messo in luce due lotti di monete, uno di 35 esemplari e l'altro di 99, ritrovate sparse sui siti, quasi tutte in contesto stratigrafico. L'originalità di questi lotti sta nella presenza importante, 13 e 19 monete, di piccoli bronzi (PBM) cosiddetti tardivi, conati a Massalia tra il 49 e il 25 a.C., ipotesi comunemente accettata. Tranne quando sono isolati stratigraficamente, essi sono mescolati con monete imperiali del II o del IV sec. d.C., periodi che corrispondono all'insediamento dei siti, mentre non ci sono tracce di occupazione durante il I sec. a.C. né all'inizio del Principato. Oltre a nuove serie o varianti sconosciute che si riscontrano nei due siti, i PBM tardivi sono nuovi o appena logori per il primo lotto mentre sono molto più logorati per il secondo. La questione che si pone è di sapere se i PBM sono stati conati nel I sec. a.C. e se possono essere stati utilizzati durante 5 secoli. A meno che nei due siti si tratti di depositi recuperati al momento dello stanziamento, ciò che sarebbe assai inverosimile, possiamo proporre una nuova ipotesi di lavoro. Lo stato "superbo" del primo lotto (e forse anche le tipologie) suggerisce una coniazione più recente che quella presupposta attualmente, cioè nel corso del I-II sec. d.C., ed un uso, probabilmente solo locale, fino al IV-V sec. d.C., forse per ovviare ad una mancanza di denaro spicciolo.

318. PELSDONK, Jan, Teylers Museum, The Netherlands

Since over a decade, the author is working on the 'translation' of numismatic databases in Holland. Those are the collection databases of Teylers Museum (c. 16.000 items) and the Geldmuseum (c. 300.000 items) as well as the Dutch coin find database NUMIS (c. 275.000 items). On a side-line he is involved in the development of the new and growing database for modern art medals from the International Art Medal Federation FIDEM. Being active with these datasets means being active with a lot of different persons and ideas. How to change databases from personal use with remarks like 'I only fill in a field if I think it is important' to general accessible databases, fit for queries like 'show me all the coins and medals minted in a specific town'. And how to connect – for instance – king Charles I of Spain to Roman Emperor Charles V, who is the same person? In this paper the author points at encountered problems and he shows solutions. Unfortunately, there appears to be not a simple single uniform road. At the same time, the process of launching databases can be smoothened if the mind-set of the involved numismatists can be bended towards questions from the general public. In fact, the modern world needs digital numismatists. People both interested in coins and databases, who are willing to try to bridge the gap between numismatists and the rest of the world.

319. PERASSI, Claudia, Università Cattolica del Sacro Cuore, Milano, Italy

Monete dal suburbio di Mediolanum. La documentazione dalla grande fossa di asportazione 10114

Le campagne archeologiche condotte fra il 1986 e il 2004 nei cortili della sede milanese dell'Università Cattolica hanno interessato una vasta area (mq 3.500 ca.), collocata fuori delle mura urbane della Mediolanum romana e tardoantica. Alle prime fasi di occupazione del sito (seconda metà del I a.C.), relative ad attività agricole, fa seguito la costruzione di edifici, più volte trasformati e abbandonati definitivamente verso la metà del secolo successivo. Agli inizi del III l'area vede l'insediarsi di una vasta necropoli, in uso almeno fino alla metà del V secolo. Dopo un probabile nuovo utilizzo in prevalenza agricolo, alla fine dell'VIII viene qui installato il monastero benedettino di Sant'Ambrogio. Le indagini hanno restituito più di 800 monete, dal periodo repubblicano (numerario celtico e romano) fino alla tarda età imperiale e oltre. Di notevole interesse, per il numero elevato di esemplari e per il contesto di rinvenimento, è il gruppo di circa 350 monete rivenute nella terra di riempimento di una grande fossa (UC IX, 10114), finalizzata allo spoglio e al recupero del materiale da costruzione delle strutture tombali precedenti. L'intervento presenterà la composizione del ritrovamento monetale, i cui termini cronologici sono rappresentati da un antoniniano di Gallieno e da un denaro di Ottone III, inserendolo nel quadro della contemporanea documentazione milanese e cercando di chiarire la natura e l'origine di tale ingente presenza di monete.

320. PERFETTO, Simonluca, Italy

Il circuito della 'moneta franca' e la funzione pubblicistica della fiera: il caso di Lanciano

Gli studi numismatici dei secoli trascorsi, in particolare quelli sul Regno di Napoli, si sono prettamente basati sulla rilevazione della presenza dei segni distintivi di una città, di un barone o di un ufficiale di zecca, ai fini della catalogazione della moneta che eventualmente li recava. Questo approccio ha completamente trascurato la possibilità che monete simili tra loro potessero promanare da emittenti, sedi di zecca e funzioni diversi, limitando lo strumento di base per l'archeologo, lo storico, il numismatico e il collezionista, vale a dire un repertorio fedele, da utilizzare nell'esame dei dati. Un recente approfondimento istituzionale delle emissioni genericamente denominate 'napoletane' ci ha consegnato un considerevole segmento numismatico ascrivibile a quel particolare circuito cosiddetto della 'moneta franca', cioè quella moneta non rimessa al diretto controllo di un mastro di zecca; quella moneta perfettamente anonima, non perché battuta in una medesima zecca, ma in quanto conforme a quella della capitale; quella moneta di minor prezzo per il mercante, ma di egual valore nella spendita, grazie alle franchigie e alle esenzioni di cui beneficiava nel luogo di produzione. Vieppiù la moneta franca, emessa in ambito fieristico, aveva l'importante compito di pubblicizzare le gesta sovrane e la maestà stessa, come testimoniano le serie pubblicistiche aragonesi. Lanciano, città demaniale che ospitava la più importante fiera d'Italia nonché una zecca particolarmente vivace, della quale sino al 2013, in ambito numismatico, si conoscevano soltanto le brevi note del Sambon e del Pansa, costituisce una delle sedi di questa particolare moneta.

321. PETAC, Emanuel, The Romanian Numismatic Society, Numismatic Department from the Library of the Romanian Academy, Romania

Coin-dies, countermarks and chronology of IIIrd century BC Alexander type tetradrachms from Odessos

The author try to establish a die-sequence of the IIIrd century BC Alexander type tetradrachms from Odessos, comparing them with the series of Alexander and Lysimachus type staters of the same city. The compact and continuous character of the issues are obvious. We know now that the mintmark was changed during the last period of Alexander type staters and not with the first issues of Lysimachus ones. The presence of a Byzantion countermark with a prow on the obverse of an Odessos tetradrachm type Price 1166 from the last series of early Alexander type tetradrachms offers a strong *terminus ante quem* - 240-235 BC. It is absolutely clear now that the huge issues of staters and sometime tetradrachms from the Western Black Sea Greek cities are related with the Syrian wars from the middle of the third century BC.

322. PETER, Ulrike, Brandenburgische Akademie der Wissenschaften, Berlin, Germany

Die pseudoautonomen Münzen von Philippopolis Thraciae

Die Zahl der bekannten Münztypen von Philippopolis ohne kaiserliches Porträt hat sich in den letzten Jahren signifikant erhöht. In dem Vortrag sollen diese Münzen beschrieben und ihre historische Einordnung versucht werden. Zudem möchte ich die besondere Relevanz der Typen für die Interpretation der städtischen Identität aufzeigen. Beispielhaft sollen mit der Erfassung und Interpretation dieser Typen die Vorzüge des online-Portals www.corpus-nummorum.eu für den Vergleich mit anderen thrakischen Prägungen demonstriert werden.

323. PETER, Ulrike, Brandenburgische Akademie der Wissenschaften, Berlin, Germany - **WEISSER, Bernhard**, Staatliche Museen zu Berlin, Germany

Die antiken Münzen Thrakiens – das numismatische Themenportal www.corpus-nummorum.eu (poster)

Auf dem Poster soll das numismatische Themenportal www.corpus-nummorum.eu präsentiert werden, in dem erstmals die antiken Münzen einer Region beispielhaft in einer online frei zugänglichen Datenbank erfasst werden. Die redaktionell betreute Seite ermöglicht es allen Interessierten, ihre einschlägigen Münzen in dem Portal zu erfassen bzw. größere Münzsammlungen sind mit dem Portal über Schnittstellen verbunden. Auf diese Weise werden die vielfältigen Münzmissionen dieser Region in einer Datenbank zusammengeführt. Kennen wir doch aus der historischen Landschaft Thrakien sehr frühe Stammesprägungen, eine reiche Prägetätigkeit griechischer Koloniestädte sowie Emissionen thrakischer Dynasten. In hellenistischer Zeit wurden hier postum Münzen für Alexander den Großen emittiert und Lysimachos richtete eine neue Münzstätte ein. Die Traditionen der Prägungen setzten sich auch unter römischer Herrschaft bis zum Ende der lokalen Prägungen unter Gallienus fort. Die einzelnen Münzen werden nicht nur erfasst, sondern nach Möglichkeit auch mit Angabe von Stempeln und Typen klassifiziert. So entsteht ein hilfreiches Forschungsinstrument, das den umfassenden dia- als auch synchronen Vergleich von thrakischen Münztypen ermöglicht. Die vielfältigen Funktionen des Portals, das nicht nur verschiedene Recherchemöglichkeiten, Visualisierungen und einen Literaturüberblick usw. bietet, sollen auf dem Poster vorgestellt werden. Das Projekt versteht sich als Pilotstudie zu einer online-Erschließung der antiken griechischen Münztypen, die nur in internationaler Kooperation erfolgen kann.

324. PICARD, Olivier, Université de Paris-Sorbonne, France

Les monnayages de Thasos: émissions monétaires et politique

Les monnayages thasiens du VI^e au II^e siècle ont des types et des systèmes monétaires très variés. La cité a voulu dès sa fondation contrôler les riches mines d'argent de l'île et du continent. Elle pratique le commerce du vin - sans doute aussi le commerce des esclaves, deux activités à forte valeur financière. Ses richesses sont jalouées par plusieurs voisins. On s'interrogera sur l'articulation entre impérialisme, commerce et institutions politiques pour définir ce que pouvait être la politique monétaire la cité.

325. PIERCY, Jeremy, University of Edinburgh, United Kingdom

Hammered Lives: Studies from a New Database of the Late Anglo-Saxon Moneyers

I have developed a new database of the moneyers of late Anglo-Saxon and early Post-Conquest Norman England. This database will facilitate the analysis of possible prosopographic networks between segments of society that are seldom studied outside of the iconography on the coins that they minted. Through numismatic and onomastic studies, I have determined that sequential patterns exist to support the idea of the minting endeavor being a potential forerunner to later guild structures and

possibly more complex than their continental counterparts. Through the examination of extant charters, diplomas, wills and deeds, I also plan to determine whether the moneyers can be linked in ways outside of the mints themselves. This research provides a different aspect of the historiography that focuses upon a non-noble group of individuals as a collective construct. While no single moneyer can be the focus of such a study outside of perhaps a recognition that they existed at a specific place at a certain time through the coin records, taking them as a group does provide certain opportunities that would otherwise be overlooked. The patterns that exist in the naming structures over various mints at various times may indicate a predisposition for certain names to be associated with the role of moneyer. If certain names are more likely to be within a specific role than others then names that occur in correlation with other activities, such as charter witnessing, may further indicate a broader connectivity between those so named at a specific location and time.

326. PILON, Fabien, UMR 7041 Arscan, équipe GAMA / association La Riobé, France

Les monnayages d'imitation de la seconde moitié du IIIe siècle après J.-C. dans les provinces nord-occidentales de l'Empire romain

A partir des découvertes effectuées à Châteaubleau (France), une thèse a été soutenue en 2010 à l'université de Paris Ouest – Nanterre – La Défense qui aborde les monnayages d'imitation émis dans les provinces du nord-ouest de l'Empire romain sous l'angle de leurs unités de production. Après avoir préalablement établi des critères de reconnaissance d'une officine monétaire, un corpus de 45 ateliers de frappe a été constitué pour la seconde moitié du IIIe siècle. Cette même recherche a conduit à en localiser 10 autres pour le milieu du IVe siècle, époque où des monnaies d'imitation vont être à nouveau produites en masse. L'exploitation des informations recueillies, et notamment l'analyse du mobilier numismatique découvert in situ, instruit sur les critères d'implantation des ateliers, sur la métrologie du numéraire ou encore sur le statut des productions: doubles sesterces frappés et coulés; deniers et antoniniens produits par coulage dans des moules en argile mais aussi par frappe, après argenture; "imitations radiées"; *nummi* et *maiorinae* frappées. La comparaison de ces caractéristiques pour les deux grandes vagues de productions considérées, séparées par quelques décennies seulement, se révèle elle aussi riche d'enseignements.

327. PILON, Fabien, UMR 7041 Arscan, équipe GAMA / association La Riobé, France

Frappes et coulage de monnaies à l'époque gauloise: synthèse de quelques découvertes et caractérisations chimiques récentes (poster)

Plusieurs découvertes ont été effectuées ces dernières années en France qui viennent compléter nos connaissances sur les techniques monétaires mises en œuvre à l'époque gauloise: poinçons, coins, et très récemment moule monétaire métallique. Cette communication fait le point sur les études dont ont fait l'objet ces précieux vestiges, mais également sur plusieurs séries de caractérisations physico-chimiques consacrées, d'une part, aux monnaies et objets monétaires issus de l'atelier de Bordeaux-Saint-Clair (Seine-Maritime), et d'autre part au numéraire sénon (statères globulaires, potins, bronzes frappés). Pour celui-ci, les objectifs poursuivis étaient de préciser les alliages mis en œuvre et de mettre en évidence d'éventuelles séries au sein des ensembles numismatiques étudiés.

328. PIZZILLI, Emanuele, Italy

Il caso dei Bacchanalia nel documento monetale

Il *senatus consultum de Bacchanalibus* del 186 a.C. aboliva il culto di Dioniso in Italia, dopo una serie di scandali che coinvolsero alcuni esponenti dell'aristocrazia romana, e che Tito Livio non esita a chiamare *coniuratio*. Dioniso, dio del vino e dell'estasi mistica, era però un grande *medium* iconografico di legittimazione dei sovrani ellenistici, e vero e proprio dio dinastico dei Tolomei. A cominciare dalla celebre *pompè* dionisiaca di Tolomeo II Filadelfo in occasione della divinizzazione del padre, Tolomeo I *Sotér* (*dios-nysos*, "Figlio di Zeus"), l'iconografia dionisiaca appare come il filo rosso della propaganda dinastica dei Tolomei, fino all'ultimo "*basileus*" della dinastia, Marco Antonio, emulo del dio. All'indomani della II guerra punica il diffondersi di tipi dionisiaci sulle monetazioni di molte città siceliote e magnogreche aveva seguito, in alcuni casi, l'adozione di tipi riconducibili alla sfera iconografica dei Tolomei: cornucopie, divinità egizie, teste femminili velate sul modello di Berenice, l'aquila su fulmine. E' noto dalle fonti il grande potenziamento del culto dionisiaco da parte di Tolomeo IV, e dai documenti monetali emerge la sua sottile ingerenza nel conflitto romano-punico. Un richiamo alla forte immagine di Dioniso sembra così suggerire l'adesione ad un modello politico "ellenistico" negli anni della ricostruzione dello stato romano e delle sue grandi trasformazioni economiche, sociali e religiose.

329. PLIEGO VÁZQUEZ, Ruth, University of Seville, Spain

While the 'Regal series', that is the Visigoth coinage extending from the reign of Leovigildo until Agila II (c. 569-711/714), has been widely treated in a series of works and very recently in corpus form, in contrast the study of the Visigoth imitations was published by W. Reinhart in the 30's and 40's of the last century, and something similar happened with the pseudo-imperial series –that is the named 'national' *tremissis*, made since the reign of Alarico II–, which is basically limited to the work of W. J. Tomasini published under the auspices of the American Numismatic Society in 1964. In spite of the usefulness of the work, fruit of the important work carried out by the said researcher, many novelties have nevertheless appeared in the last 50 years. In our communication we will present the work we have been doing on the basis of the study of olds and recent treasure troves, individual finds, as well as the revision of these coins in museums, institutions and private collections, many of them not including in Tomasini or Reinhart works. Our objective is to eventually structure a full corpus that includes both Visigoth imitations and the pseudo-imperial series in a comfortable and easy to use volume for the classification of these interesting coins, a goal which, in our opinion, should be the ultimate objective of numismatic catalogues.

330. PODDI, Stefano, Accademia Italiana di Studi Numismatici, Bari, Italy

I buoni dei prigionieri di guerra della IIa Guerra Mondiale

Fin dalle guerre più remote, si è posto il problema di come gestire i prigionieri catturati durante le battaglie, le soluzioni sono mutate a seconda del periodo storico e quindi dei diversi valori culturali di riferimento: all'inizio i prigionieri vennero brutalmente uccisi sul campo, durante l'Impero Romano divennero schiavi e nel corso del Medioevo venne chiesto un riscatto per la loro vita. Quando la guerra divenne un fenomeno di massa il numero dei prigionieri si incrementò in modo esponenziale, si pensò quindi di gestirli segregandoli entro aree ristrette e sorvegliate: i campi di prigionia. In molti di questi campi circolavano dei buoni forse provenienti da enti caritatevoli o frutto dei piccoli servizi svolti dai prigionieri, sia dentro che fuori del Campo di prigionia. Per questa microcircolazione non si poteva certamente utilizzare la valuta corrente nel paese che ospitava il campo, altrimenti si sarebbe dato un vantaggio agli eventuali fuggitivi, per cui vennero stampati dei buoni a circolazione limitata, validi esclusivamente all'interno, da spendersi nello spaccio o nella mensa del campo. Di valore, materiale, forma, dimensione e fattura differenti, i buoni sono circolati nei campi dei prigionieri di quasi tutto il mondo. Questa rara tipologia di cartamoneta risulta particolarmente suggestiva ed evocativa, per non dimenticare mai le atrocità e la scelleratezza di ogni guerra. Da questi buoni, anche se graficamente ingenui, emerge, più di tante parole, una vibrante testimonianza di una "prassi guerresca" drammatica e cruenta, che l'umanità dovrebbe bandire per sempre.

331. PODDI, Stefano, Accademia Italiana di Studi Numismatici, Bari, Italy

Dalle valute nazionali alla valuta comune: l'Euro (poster)

Il sogno di una comune moneta europea parte da molto lontano, dalla teoria di Platone che prevedeva l'uso di un *nomisma hellenikon* comune per tutte le *poleis* greche. Nella Grecia del VII secolo a.C., ogni *polis* ambiva ad una propria moneta come simbolo di autorità e di autonomia; questo diede luogo alla creazione di più di un migliaio di monete diverse, alla nascita e proliferazione dei trapezisti e alla sopracitata teoria. Dopo oltre 27 secoli il sogno si è realizzato e la teoria platonica si è avverata allargando i suoi orizzonti. Dal 1 gennaio 2002 è iniziata, nei primi 12 paesi europei aderenti, la circolazione monetale in euro, la comune valuta europea; ma già oggi la cosiddetta "zona euro" si è allargata a 18 paesi. L'idea del poster nasce dall'esigenza di trasmettere con una sola immagine quanto non si potrebbe comunicare con mille parole. Quanto è accaduto è un primo grande passo nella giusta direzione, dovranno seguire significative azioni di cessione di sovranità dei paesi aderenti, per creare una comunità coesa che riscopra il valore della solidarietà. Un primo grande obiettivo è stato raggiunto: fra i paesi europei non c'è stata guerra da quasi 70 anni. Il poster, attraverso la riproduzione delle banconote dell'ultima serie emessa pre-euro dai singoli 18 paesi, convergenti verso la comune valuta europea, vuole rappresentare in forma iconica e colorata, il percorso, che i diversi paesi hanno compiuto per giungere all'euro, evidenziando quanto è già realtà.

332. POLANSKÝ, Luboš, Národní Muzeum, Czech Republic

Marginal legends and images on Bohemian deniers of the 10th century

The oldest Bohemian coins bear important information in their textual and pictorial components. The data represent an extraordinary source for research in history of the Bohemian state in the second half of the 10th century. On the deniers of that period, there are names of rulers and mint-names, plus names of wives of the Bohemian dukes and other relatives of the ruler's

family ruling the country, and also names of mint-masters, bishops and saints. Proclamatory marginal legends – like “*Hic denarius est episcopi*” – as well as names, abbreviations or slogans inside the chapel image represent a special data segment. Revision of publications presenting finds of these coins can bring new impulse and many interesting possibilities of interpretation. Also images of the deniers are very interesting. Soon after production of the first Bohemian coins, the Bohemian coinage abandoned primary Bavarian-Swabian prototypes and took more progressive way. There are nine basic motives – cross, chapel, hand or God’s right hand, anchor, sword, bird, head and bust of Christ, head and ruler’s head, axe – varied in several symbolic forms. The majority of motives are of sacral character, only few of them are probably of profane character. Besides the Bavarian-Swabian prototypes, there is also Anglo-Saxon and Italian influence visible. All these adopted motives were developed further in the Bohemian milieu and added on coins with new mostly Christian symbols unseen so far. Brief survey and interpretation of the most interesting images and marginal legends on the first Bohemian deniers will be presented.

333. PONTING, Matthew, University of Liverpool, United Kingdom – **BUTCHER, Kevin**, University of Warwick, United Kingdom

The metallurgy of Roman silver coinage: Augustus to Commodus

This paper will present an overview of the results of a succession of analytical projects investigating the metallurgy, chemical and isotopic composition of Roman silver coinage from Augustus until the death of Commodus.

334. POPESCU, Adrian, Fitzwilliam Museum, United Kingdom

The Eagle and the Lion. Medallions of Trajan Decius struck for Dacia

Coins produced in copper alloy and in three denominations for *Provincia Dacia* between the reigns of Philip I and Gallienus are well known and several studies were dedicated to this coinage over the last century. The aim of this paper is to present two medallions which appeared on the market in the last decade and were therefore not published in the two most recent *corpora* dedicated to the coins produced for *Provincia Dacia*. The wider political and military context in which the medallions were struck will be explored but the discussion will focus mainly on the date and reason for their production.

335. PROKOPOV, Ilya, First Investment Bank, Bulgaria - **GRIGOROVA-GENCHEVA, Valentina**, First Investment Bank, Bulgaria

New Hoards with Small Denomination Coins of the Island of Thasos (6th-5th century B.C.): Context, Interpretation and Dating

Our regular trips on different routes from Bulgaria to the island of Thasos (ca 300 km) over the past ten years have allowed us to get a clear idea of the dense network of roads and the numerous corridors for trade and cultural contacts between the island and the one-time Thracian lands. Nowadays, like in ancient times and in later ages, the movement of people and goods in both directions has been active and year-round. Undoubtedly, based on these observations, the latest coin finds in Bulgaria, and the interpretation of some older finds, we can claim that the island of Thasos and the territory flanked by the valleys of the Struma and the Mesta Rivers all the way north to Sredna Gora Mountain have formed an area whose population has common economic and political interests. This report will provide a comprehensive overview, interpretation and dating of coin hoards from the modern Bulgarian territories, including small denomination coins of the island of Thasos, the most significant of which include: Gotze Delcev I and II, Koprivlen, Krustevitch, Satovtcha I and II, Skrebatno I and II, Vetren. The analysis of coin stamps has enabled us to propose a new dating for some coin types from the Island of Thasos. The distribution territory of small coin denominations and the review of publications on the economic and political relations across the region have allowed us to corroborate some assertions and also develop new hypotheses on the island’s relations with the Thracian hinterland.

336. PUEBLA MORÓN, José Miguel, Spain

El astrágalo de Hermes en la moneda de Himera (483 a.C. – 472 a.C.)

Utilizado durante el periodo de dominio akragantino de la Himera, o incluso durante el periodo intermedio entre la caída del control akragantino y el inicio de la acuñación de los famosos tetradracmas de Himera con la ninfa realizando un sacrificio

ante un altar, la presencia del astrágalos en la moneda de Himera es un hecho difícil de explicar debido a la escasez de ejemplares y a la supuesta falta de relación con los demás elementos iconográficos utilizados en la moneda himerense. Las principales hipótesis han sido tres, interpretado como ficha de juego, como medida de peso o como objeto de adivinación. En esta exposición voy a tratar de demostrar como el astrágalos representado en la moneda de Himera hace referencia a Hermes dentro del culto que rodea a la ninfa epónima de Himera, ya que si nos fijamos en los elementos que acompañan a la divinidad acuática se pueden ver referentes a la imagen de Hermes como el caduceo o kerykeion, la cabra o el sileno. Para desarrollar mi hipótesis me basaré no sólo en el análisis de la iconografía y en paralelos numismáticos sino también en los resultados aportados por la arqueología y en el estudio e interpretación de las fuentes clásicas.

337. RACCUIA, Carmela, Università di Messina, Italy

Dal "bue" alla civetta: riverberi di un percorso politico e culturale

L'indagine parte dall'asserito antefatto di una monetazione col tipo del bue, introdotta in Atene per iniziativa di Teseo (Plut. Thes. 25, 3: ἔκοψε δὲ καὶ νόμισμα, βοῦν ἐγχαράξας), e mira a recuperare il sostrato ideologico e culturale in cui questa tradizione trovò elaborazione e diffusione. Ciò comporta un'attenta riconsiderazione della prima esperienza monetale storica di Atene, notoriamente costituita dalle cosiddette *Wappenmünzen*, oggetto di serrato dibattito sia per la cronologia e la titolarità dell'iniziativa, sia per la interpretazione dei tipi e la funzione delle emissioni, sia per la individuazione dell'area e la durata della loro circolazione, progressivamente obliterata dalle *glaukes*. In chiave storica si impone una rilettura della temperie dell'Atene di VI sec. a.C. con particolare attenzione al 'cinquantennio' tirannico in cui tensioni politiche e militari, relazioni e contatti ad ampio raggio, risorse d'oltremare e strategie culturali dei Pisistratidi consentono di inquadrare lo sviluppo del fenomeno monetale e di coglierne la valenza ideologica e propagandistica a livello iconografico.

338. RAEMY TOURNELLE, Carine, Musée monétaire cantonal, Switzerland

Trouvailles monétaires d'églises en Pays de Vaud

L'étude de la circulation monétaire au Moyen Âge dans une région est réalisée grâce aux trésors et aux trouvailles isolées anciennes. Toutefois, il est nécessaire de renforcer le discours à l'aide de monnaies trouvées en contextes documentés et commentés. Dans le canton de Vaud, les restaurations et les fouilles archéologiques des églises, lieux de rassemblement de personnes appartenant à toutes les classes sociales, ont permis de mettre au jour des milliers de pièces en majorité médiévales. L'église Saint-Martin de Vevey, sise au bord du Léman, a livré près de 600 monnaies. Elle fournit de la sorte un échantillon important représentatif de la circulation monétaire en Pays de Vaud au Moyen Âge et dans une moindre mesure, à l'Époque moderne. Les faciès monétaires d'autres églises situées à proximité sont également à prendre en considération afin d'apporter de nouvelles informations sur la région lémanique. Cette étude comparative a pour but d'approfondir les connaissances actuelles sur les échanges commerciaux et religieux.

339. RAMASUBBAIYER, Krishnamurthy, Dinamalar Tamil Daily, India

The influence of early roman imperial coin symbols on Sangam Age Chera and Pandya coins (only in the Proceedings)

Sangam Age is an important period in the early history of Tamil Nadu, India. Tamil Nadu is among the largest and most populous state. The Tamil the LINGUA FRANCA of the region, known as Tamizaham during early centuries of the Christian era, was ruled by three important dynasties - Chera, Chola and Pandya - during this period, usually referred to as Sangam Age. Out of the two branches of the Pandyas, one ruled with Madurai as the capital and the second, a small branch, ruled with Korkai as capital. Korkai is situated about 3 km north of the Tahamirabarani River and about 6 km from the shore of Bay of Bengal and was an ancient port. Sangam Age coins issued by the Cheras and Korkai Pandyas have some symbols which appear to have been copied from Imperial Roman *denarius* coins of Augustus and Tiberius. In this paper I have provided the details about similarities between Roman and Pandya coins.

340. RAMBACH, Hadrien, United Kingdom

The coins- and gems-collector Don Carlo Trivulzio (1715-1789)

The prestigious Milanese name of Trivulzio appears regularly, both in numismatic auction-lists and in museum-catalogues, but it is mostly the collecting-activity of this family in the bibliophilic and painting fields that has been studied so far, and I wish to devote this paper to the family's main collector: Don Carlo Trivulzio (1715-1789). I will present what is known of the

contents of his collections of ancient coins and engraved gems, which must remain associated because they were collected together, and occasionally swapped against each other: for example in 1776, count Gelosi gave Trivulzio some Roman gold coins against an agate cameo of Medusa. Various documents of the time, such as the letters of Pietro and Alessandro Verri, and the partially-unpublished manuscript *Persone Illustri, o per nascita o per erudizione che furono da ma Carlo Trivulzio per osservare le mie poche cose antiche* (Biblioteca Trivulziana ms. 2107), allow us to know better Don Carlo Trivulzio's collecting interests and habits, as well as his network of correspondents.

341. RAMSKOLD, Lars, Sweden

Constantine the Great's pagan Festival of Isis tesserae reconsidered

Tesserae struck for the Festival of Isis were exclusively produced at the imperial mint in Rome from Diocletian to Valentinian II. These *tesserae* carried images and legends celebrating gods associated with the Isis cult, such as Hermanubis, Harpocrates, Serapis, and Isis herself. Almost one hundred *tesserae* from Constantine's reign are known, all with an imperial bust obverse. This is remarkable considering Constantine's strong support for Christianity. Only Julian struck a larger variety of *tesserae* than Constantine I. Unusually, Constantinian *tesserae* show reverses with Victory and the Young Prince in addition to Isis and Hermanubis. This study examines the material through die linkages. Nearly all specimens are linked to others through shared dies, and the material is sorted into several die-linked groups. First the groups are arranged chronologically according to the known sequence of appearance of the Caesars on the obverses. Then the imperial portraits are compared to the regular coinage from the Rome mint, because the same engravers produced the dies for both regular coins and Festival of Isis *tesserae*. The result indicates that contrary to previously held belief, these *tesserae* were not struck annually during Constantine's reign, but on a limited number of occasions. Some, but not all, of these occasions seem to coincide with Constantine's few visits to Rome. It is possible that the Festival of Isis *tesserae* were produced for 3 January, when the emperor took new vows for the New Year, rather than for 5 March, the traditional starting date of the Festival of Isis.

342. RINALDI, Gerarluigi, Italy

La collezione numismatica di Eugenio Scacchi (Società Napoletana di Storia Patria)

La collezione di Eugenio Scacchi, di proprietà della Società Napoletana di Storia Patria, è costituita da 2859 monete - 263 in oro, circa 1700 in argento e mistura e circa 900 in lega di rame - e si sviluppa sulle zecche dell'Italia Meridionale e della Sicilia a documentarne in maniera sistematica l'intera produzione monetaria dal VII sec. all'unificazione nazionale. Sotto il profilo cronologico circa 180 monete si estendono dal primo medioevo agli Svevi, circa 80 sono angioine, circa 440 aragonesi, circa 900 vicereali e circa 1250 borboniche; poche le post-unitarie, in conseguenza della quasi immediata soppressione delle zecche regionali operata dallo Stato sabaudo. Alla pluralità di zecche medioevali dell'Italia meridionale - in particolar modo Gaeta, Capua, Amalfi, Salerno, Benevento e Brindisi - segue dall'età angioina un accentramento della produzione monetaria nella zecca di Napoli, cui pur si affiancano dai decenni finali del XIV sec. alla prima età vicereale le emissioni della zecca dell'Aquila e delle zecche di Sulmona, Guardiagrele, Chieti, Tagliacozzo e Sora; la monetazione siciliana è puntualmente documentata nelle emissioni di Messina e Palermo e da alcune emissioni di Siracusa e Catania. Formata fra l'ultimo trentennio dell'Ottocento e gli anni '20 del Novecento, la collezione è espressione diretta del clima culturale da cui trassero origine la Società Napoletana di Storia Patria e il Circolo Numismatico Napoletano, similmente alle collezioni Cagiati, Sambon, Giliberti e Catemario, ma unica a non essere stata dispersa sul mercato antiquario, costituendo quindi un riferimento indispensabile per uno studio profondo dello spirito collezionistico numismatico post-unitario.

343. RIPOLLÈS, Pere Pau, Universitat de València, Spain – GOZALBES, Manuel, Museu de Prehistòria de València, Spain

The unofficial Roman Republican asses struck in Spain

In 1974, Crawford revealed the necessity of having a study on the unofficial Roman republican coinages. Some years later, in 1982, on the occasion of the Convegno "Stato e moneta a Roma", he published a survey on these coinages, a time from which they began to be more considered. Since then the new data available has allowed a more accurate approximation on this important monetary phenomenon. A part of them were struck in Roman Spain. Among unofficial issues that can be attributed to the Iberian peninsula, the *semis* was the most common denomination with a great variety of types and weights as demonstrated in a recent study (P. P. Ripollès and R. B. Witschonke, forthcoming). The unofficial *asses*, nevertheless, have not yet been studied, consequently this communication deals with this denomination. In the last years, the *asses* have been recorded in a significant amount in the Iberian peninsula, in coin finds and in public auctions, allowing us to attribute some

types to this territory. Unlike the unofficial *semisses*, the *asses* are less numerous and more regular concerning the module and weight. A significant part of them was obtained by means of sand casting and its high weight suggests that most of them were struck during the 2nd century B.C.

344. RISVAAG, Jon Anders, NTNU University Museum, Trondheim, Norway

Investigations of bone-ash cupels from the Archbishop's mint in Trondheim, Norway

During the 1991-1995 excavations of the Archbishop's Palace in Trondheim, Norway three successive mints, dating AD 1500-1537 were unearthed. In and associated with these mints 143 bone-ash cupels from AD 1500 -1537 were found. The cupels have been produced out of pure bone-ash from animals as described in 16th century literature. The cupels fit into five groups according to size. Four used cupels have been cut in half in order to study their inner microstructure by a group consisting of metallurgists and a numismatist in order to document and investigate both the chemical processes in the cupels, and whether the cupels were locally made or imported. This paper will present results from these analyses.

345. RODRÍGUEZ CASANOVA, Isabel, Spain

Dos nuevos tesorillos de divisores hispánicos

Se presentan dos nuevos conjuntos monetarios encontrados en Andalucía (sur de España) formados por monedas divisionarias de diferentes cecas. Destaca el abundante número de los denominados "divisores inciertos del siglo III", lo que permite proponer una serie de consideraciones sobre su estilo, procedencia y evolución tipológica.

346. ROMANO, Francesco Paolo, IBAM-CNR / INFN-LNS, Italy - **MANENTI, Angela Maria**, Museo Archeologico Regionale "Paolo Orsi", Siracusa, Italy - **AMATO, Rosalba**, Museo Archeologico Regionale "Paolo Orsi", Siracusa, Italy - **CALIRI, Claudia**, INFN-LNS, Italy - **CATALANO, Roberto**, INFN-LNS, Italy - **PAPPALARDO, Lighea**, INFN-LNS, Italy - **RIZZO, Francesca**, INFN-LNS, Italy

I pegasi di Siracusa a confronto con quelli di altre zecche circolanti in Sicilia nella seconda metà del IV secolo a.C.: considerazioni storico-archeologiche ottenute attraverso lo studio compositivo delle monete mediante tecniche non-distruttive

Le tecniche analitiche basate sull'utilizzo della fluorescenza a raggi X sono particolarmente indicate per la caratterizzazione non-distruttiva di reperti monetali di interesse storico-archeologico. L'analisi non-distruttiva è in grado di fornire indicazioni sulla composizione della lega, sulla tecnologia di produzione, sulla provenienza, sullo stato di conservazione e sulla autenticità dei reperti in studio. In questo lavoro vengono presentati i risultati di una indagine sistematica condotta su circa 200 reperti presso il Museo Archeologico "Paolo Orsi" di Siracusa, nell'ambito di una collaborazione scientifica tra il Museo, l'IBAM-CNR e i INFN-LNS, con il fine di studiare la produzione monetale in argento presente nel territorio siciliano. Particolare considerazione è stata riservata ai "pegasi" d'argento prodotti dalla zecca di Siracusa e a quelli coevi delle diverse colonie greche, sotto l'influenza della città di Corinto, presenti in vari tesoretti nel periodo della seconda metà del IV secolo a.C. I risultati preliminari di questo studio mostrano come la determinazione della composizione chimica della lega ed in particolare della sua finezza possa fornire nuove indicazioni sulle relazioni commerciali, politiche e sociali tra la Sicilia e la Grecia nel periodo storico oggetto di studio.

347. ROMANOWSKI, Andrzej, National Museum in Warsaw, Poland

Roman coin finds of the Przeworsk Culture settlements in Małopolska (Lesser Poland) (only in the Proceedings)

Lesser Poland is a region of Poland, in which the biggest number of Roman coins deposited on Przeworsk culture settlements is registered so far. The amount of the material known from former studies and gained in recent years allows to make new observations in this field. Today, we can compare the data from the new studies, to the unique finds from the settlement in Jakuszowice known previously and verify the accuracy of submitted earlier thesis. An examined chronological structure and denominations of coins finds on settlements have allowed to draw conclusions on the identity of coins in different types of finds. There have been made observations concerning the inflow of money, their circulation and function of Roman coin

within the settlements. This studies of this type make description and interpretation of money function in the sphere of everyday life, which is an essential component of a living culture (*die lebende Kultur*).

348. ROSSINI, Fabrizio, Switzerland - **GIANAZZA, Luca**, Italy

Renaissance portrait coins: the innovation, and its spreading throughout Italy and Europe

Physiognomic portraits started to appear in the late XIV/early XV century, first on medals and then on coins, with Italian states being at the forefront of this important innovation. This paper aims at investigating the reasons behind the introduction of physiognomic coin portraiture, a practice which encountered an immediate success and was soon imitated by almost all lords, kings and emperors throughout Europe. The reasons why such novelty met an immediate success and the conditions which actually brought about this fundamental innovation which have not, in our opinion, been sufficiently investigated in depth, are discussed here with the aim to provide some tips and guidelines for future research. Our contribution also draws some parallels between painting portraiture and coin portraiture in the XV century with the attempt to investigate the cultural climate, the artistic and literary elements, the historical evolution and the economic situation that created the conditions for such innovation to develop and foster influencing numismatic iconic tradition from the Renaissance times onwards. A special attention is dedicated to the figure of the die engraver. Despite comprehensive lists of the officers for most of the mints interested by our investigation, people who specifically attended to the creation of the dies usually remain poorly known. We will know them as skilled, eclectic craftsmen – goldsmiths, sculptors, medalists – largely appreciated in the Italian and European courts, frequently moving from one mint to another.

349. RUDNICKI, Marcin, University of Warsaw, Poland

Minting period "E" – the final chapter in the history of the gold coinage of the Boii (after 41/40 BC)

Karel Castelin argued that the latest gold coins of the Boii were staters and their fractions (1/3 and 1/8) with the inscription BIATEC – struck in the *oppidum* of Bratislava. Within his system of relative chronology this researcher defined this age as minting period "D". The lower limit of period "D" was designated by events associated with the defeat of the Celts in their war with Dacians led by Burebista in 41/40 BC. However, it now appears that the minting activity in the *oppidum* of Bratislava was not the last chapter in the history of the gold coinage of the Boii at all. Finds made in more recent years have shown that, despite the fall of the *oppida* on the Middle Danube, during the latter half of 1st century BC and into early 1st century AD the activity of Celtic mints to the north of the Carpathians and the Sudetes continued unabated. Nominally gold coins were struck according to the Boii system in at least three centres. A continuity of the older tradition is evidenced not only by the trichotomy of denominations (stater, 1/3, 1/8, 1/24) and the technology of their production but also by their iconography. The scale of this phenomenon is astounding, as is its emergence on the territory occupied by Przeworsk culture tribes. I discuss the final, youngest chapter in the history of gold coinage of the Boii which, by reference to the system of chronology developed by Castelin, I propose to define as minting period "E".

350. RUOTOLO, Giuseppe, Accademia Italiana di Studi Numismatici, Bari, Italy

Attualità dell'opera di Filippo Paruta "Della Sicilia descritta con medaglie" edita in prima edizione a Palermo nel 1612

Il nobile palermitano Filippo Paruta fu il primo a fornire una ampia silloge di monete siciliane redatta con criteri scientifici nel 1612. Le monete sono presentate con criterio quanto mai moderno giacché per ciascun esemplare l'autore fornisce il nome del possessore o dei possessori, il luogo e il tempo del ritrovamento. Nell'opera sono citati anche numerosi rinvenimenti isolati di monete o di ripostigli. Per le legende in lingue diverse dal latino e dal greco sono citati anche i traduttori. Le incisioni sono perfette e accurate. L'opera fu ristampata, anche con aggiunte, nel 1649, nel 1697 e nel 1723. Infine il principe di Torremuzza Gabriello Lancillotto Castello fra il 1770 e il 1772 propose ancora aggiunte e correzioni all'opera del Paruta.

351. RUOTOLO, Giuseppe, Accademia Italiana di Studi Numismatici, Bari, Italy

Un simbolo religioso poco noto su monete di ΤΑΡΑΣ : il πόμπος (poster)

Su molte monete della città di Taras (Magna Grecia) un personaggio rappresentato su una delle facce della moneta sostiene un simbolo che è sempre stato interpretato come fuso o conocchia. Se ne propone una diversa interpretazione che fa supporre si possa trattare di un simbolo dionisiaco, il *rombos*, utilizzato nelle cerimonie religiose.

352. RUSKE, Alexander, Deutsche Bundesbank, Money Museum & Numismatics, Frankfurt am Main, Germany

The new Money Museum of the Deutsche Bundesbank

Experiences and outlook. Since 1999, the Money Museum of the Deutsche Bundesbank has informed and educated more than half a million visitors on all matters relating to money and captivated their imagination with the highlights from its numismatic collection. With its wide-ranging programme of lectures and themed tours, the Money Museum has been the centre of the Bundesbank's work in economic education. Nevertheless, developments that have occurred in the financial world over the past one-and-a-half decades mean that core parts of the exhibition are now obsolete or outdated. The Bundesbank is therefore reorganising its Money Museum located in Frankfurt am Main. With its intuitive and innovative presentation concept, the new exhibition aims to impart basic knowledge about money, its history and the tasks of central banks. For the part of the exhibition dealing with numismatics and the history of money, this approach will involve a wide range of topics. Visitors will be given a broad overview as well as an opportunity to linger and delve deeper. The future exhibition will again contain a magnificent display of items from the coin and banknote collection, but it will go beyond the conventional presentation of objects in traditional coin displays. Current topics, such as the issue of monetary stability, will be dealt with from a historical perspective. Visitors will learn about the origins of topics on the current political agenda and how similar challenges were tackled in the past.

353. RUSSO, Natalia, Università di Messina, Italy

Una lettura non tradizionale del ruolo del Sileno: i documenti monetali

L'immaginario collettivo, spesso assecondato da fonti letterarie ed iconografiche, si è dimostrato maggiormente propenso a giudicare il Sileno come un personaggio secondario, un membro *leader* del corteggio dionisiaco ma pur sempre un subordinato di Dioniso. Esistono tuttavia altre testimonianze, archeologiche e numismatiche, che evidenziano una posizione di prim'ordine del Sileno, riscattandolo dall'assoluta dipendenza da Dioniso. La raccolta e l'analisi iconografica dei tipi monetali del Sileno, l'attenzione alla loro distribuzione diatopica e diacronica documentano che l'indipendenza del Sileno da Dioniso si afferma solo in alcuni ambiti del Mediterraneo (l'area etnea della Sicilia, l'area traco-macedone, alcune regioni del Mar Nero e centri dell'Asia Minore occidentale) governati in genere da tiranni o da sovrani. Più specificatamente, nei secoli VI-IV a.C., emerge un'immagine del Sileno che, in maniera parziale o totale, campeggia sul diritto di esemplari con elevato potere d'acquisto. La rappresentazione del Sileno, nelle sue differenti espressioni iconografiche, avviene sempre nel pieno rispetto di canoni ben precisi di selezione, come la presenza sul diritto della moneta - uno spazio riservato ai personaggi più importanti - e la frontalità dell'immagine, un'esclusiva di sovrani e divinità maggiori. La testa del Sileno viene arricchita da importanti elementi connotativi, come la corona di edera, analogamente a Dioniso, o il diadema, accessorio simbolo per eccellenza del potere regale. Il Soggetto si presenta ulteriormente diversificato per età, differente capigliatura, presenza o meno di attributi secondari, quasi fosse un personaggio reale rivestito di ruoli di prestigio alla stessa stregua di divinità, personaggi politici o intellettuali.

354. SÁEZ ROMERO, Antonio Manuel, Universidad de Cádiz, Spain - **MORENO PULIDO, Elena**, Universidad de Cádiz, Spain

Rethinking Gadir coins in Context. Chronological review and update of the Archaeological Data from the Punic Salt-Fish Factory of Las Redes (Cadiz Bay, Spain) (only in the Proceedings)

The site of Las Redes, placed in the continental Northern coast of the current Cadiz Bay, is one of the major milestones of the recent historiography about the Western Punic economy, which was mainly based on the production and international trade of salt-fish by-products. Excavated in 1980, it has been classified as one of the numerous secondary industrial centres that would have linked the city of Gadir to the production of salt-fish products between the 5th and the 3rd centuries BC. In the later phases of the site were uncovered some of the earliest coins from the mint of Gadir, as they belong to the first series of the city but the dating of this early moment of coining remains doubtful today (as the coins usually have not been analysed in their archaeological context). The examination of this site makes possible the proposal of a new chronological framework for the successive periods of the industrial centre by paralleling it to other widely studied similar sites like San Bartolomé (in the insular area) or Puerto-19 (not far from Las Redes, in the coast of modern El Puerto de Santa María). This paper focuses on these chronological features, paying special attention to the dating and contextualization of the Gadir coins linked to the later phase of the site as they were initially used to establish the chronology of the earlier minting of the local coinage, being one of the rare examples of monetary circulation in the Punic industrial centres of Cadiz Bay.

355. SÁEZ ROMERO, Antonio Manuel, Universidad de Cádiz, Spain - **MORENO PULIDO, Elena**, Univesidad de Cádiz, Spain

Amphorae stamps and coinage iconographies. New aspects of the production and commercial organization of Punic Gadir (Cadiz Bay, Spain) (poster)

In general terms, it can be proposed that the stamping process of the amphorae produced in the pottery workshops of Gadir (Cadiz Bay, Spain) could have started almost at the same time than the early introduction of the city in the monetary economy, nowadays dated, doubtfully, between the end of the 4th and the early 3rd centuries B.C. This chronological coincidence suggests the existence of a close correlation between the management and the accounting processes of the Gadiritan industrial production with the very emergence of the local mint and the daily use of currency in the city. Moreover, the growing catalog of iconographic motifs used for the sealing of amphorae seems to have a clear inspiration in the Mediterranean coinage, suggesting a similar meaning between these propaganda and control instruments whose emblematic meaning, in a clearly religious inspiration, can be today reviewed and interpreted in relation to the structures of production and international commercialization of the commodities from Gadir. Official icons as uraeus, horses, birds, dolphins and clear allusions to divinities like Tanit or Melqart-Herakles mix together among the motifs of local amphorae stamps with more prosaic and mundane icons, such as representations of potters or fishermen (with a clearly economic-industrial significance). This paper proposes an updated review of this iconographic information, the possible uses of those stamps and their commercial and productive meanings, while considering the use of the industrial seals in a closely linked process to the origin of the coinage of Punic Gadir.

356. SALAMONE Grazia, Università di Messina, Italy

Il tipo della 'testa femminile' sulle monete greche: funzione giuridica e identità della polis

The types examined are the female heads and figures of uncertain or unidentified identity, generically indicated in the repertoires as 'Nymph' or 'Female Head', or identified with different deities. The collection of documents, made through the SNG and databases on line, allowed us to reconstruct the diachronic and diatopical spread of these female subjects on the Greek coinage of the late Archaic, Classical and Hellenistic age. The subjects collected (150 ca) show a diachronic distribution with peaks in the fourth century B.C. The largest number of examples can be found in Asia Minor and Northern Greece. In the documents collected the iconographic scheme - in almost all cases - is that of the head, while the female figure as a whole is limited to 20 instances ca. The iconographic analysis and comparison of these subjects with those identified by the legend as eponymous 'nymph' of the City, together with their diatopic analysis and diachronic frequency, show the specific function of the female head types. Present almost always on the obverse, a privileged 'location' in comparison even with male subjects, they cover a specific function of juridical legitimacy of the currency. Like the portraits of the Eastern ruler and the later Hellenistic *basileus* or Roman *Princeps*, the female head not only identifies the issuing authority, but represents the civic body that is the guarantor and owner of the coin. Emerges a clear perception and a 'propaganda' of a strong identity of the *polis*, especially present in the fourth century BC.

357. SANAHUJA, Xavier, Societat Catalana d'Estudis Numismàtics, Barcelona, Spain

Catalonia, Barcelona and Aragon: Historical Titles and Styles Shown in their Coins (878-1846)

The political future of Catalonia is a current topic in Europe. Because of the political importance, the related debate is obviously often plagued with inaccuracies, falsehoods and half-truths that alter the knowledge obtained by historians and determine their researches. The aim of this paper is to clarify the titles and styles that have been used to designate the political systems of Catalonia (independent or not) from 10th to 19th centuries, and discard some false stereotypes that have spread over decades in Spain and throughout Europe. Results excerpted from coins remind us of the importance of Numismatics as a useful auxiliary science of History. The legends that appear on the coins faithfully reflect the identity of their issuer. Logically, the regal ownership of the coins should be fully reflected in the legends and / or symbols that appear in the field of the coins. Reading and understanding these legends and symbols show us definitively the real political relationship that existed between Catalonia and Aragon, the Castile and the Spain of the Habsburgs, and the Bourbon Spain. The results do not match what we can read in European History or Numismatic related books, which are based on styles and constructions made and recreated in the nineteenth century. And these results must join definitely the paradigm of European historiography.

358. SANCINITO, Jane, University of Pennsylvania, United States of America

Parthian Circulation: A Study of the Wilson Hoard (IGCH 1816)

Parthian numismatics has long been considered the realm of specialized collectors who, in turn, have published the materials we have today: primarily David Sellwood's "*An Introduction to the Coinage of Parthia*" and his associated articles, including the brief but tantalizing "*Trade Routes through Parthia*". There is a desperate need for further work to be done on Parthian numismatics, but it cannot proceed until the materials we have are published. Accordingly, this paper attempts a two-fold project: first, the publication of a hoard of coins discovered near Ahar, a village outside of Tabriz, Iran, in 1923, and which, in its current state in the Princeton University collection, contains 155 silver drachms of Orodes II and rulers of the Parthian "dark ages," and, second, a further exploration of the circulation of Parthian coins based on the mints represented in the hoard and its find location. It will be argued that the hoard (IGCH 1816) represents a collection from relatively early in the reign of Orodes II (57-37 BCE) at which time the east-west trade route that Sellwood noted in his 1991 article was still flourishing, as was a north-south route from Susa to the southern coast of the Caspian Sea. In conclusion, the coins of this hoard open up our understanding of the state of Parthian economics and should be made available to the field for further examination and analysis.

359. SANDERS, George, Royal Palace Het Loo, The Netherlands

The Triumphal Medals of the Republic of the United Netherlands: an instrument of politics and propaganda, 1580-1620

At the end of the sixteenth century the provinces that nowadays constitute the kingdoms of the Netherlands and Belgium and the Grandduchy of Luxemburg rose in revolt against their overlord, the Spanish king Philip II of Habsburg. In the ensuing struggle that lasted for 80 years, the battle wasn't fought with arms only, but also by propagandistic means. An important feature in the latter was a new type of medal, called Triumphal Medal, produce at the Provincial Minthouses. With their coinlike appearance they were new a novelty in the Netherlands.

360. SANTAGATI, Elena, Università di Messina, Italy

Identità federale nelle emissioni monetali: alcuni esempi

Quella federale è un'istituzione politica che affonda le radici in un passato assai antico. Da semplice organizzazione *kata komas* di età alto-arcaica, lentamente, nel corso dei decenni, il *koinon* ha definito e consolidato le sue strutture politico-istituzionali fino a presentarsi in età classica come entità politica ben strutturata e ben presente nelle dinamiche geo-politiche della Grecia con propri organismi, con proprie istituzioni e con proprie emissioni federali. Per lo scarso interesse che il fenomeno federale ha suscitato tra gli scrittori antichi che privilegiarono quella che consideravano la forma politica per eccellenza, ossia la *polis*, le sole fonti letterarie risultano insoddisfacenti per un approfondito studio del fenomeno. Tale lacuna può essere colmata dallo studio della moneta che offre un importante contributo nella ricostruzione delle proiezioni ideologiche e delle trasformazioni sociali di tali istituzioni politiche. L'analisi dell'iconografia monetale di alcuni *koinonà* presi a campione dimostrerà come le immagini scelte dalle *elites* federali intendevano privilegiare, enfatizzandole, figure eroiche e tipi connotanti l'etnia al fine di nobilitare realtà politiche considerate, nella visione politica greca, marginali. Attraverso i tipi scelti unitamente alla designazione dell'etnico, l'autorità emittente, infatti, mirava a coagulare forme di identità collettiva da veicolare nel più vasto ambito delle relazioni internazionali; si riconosceva dunque e si autorappresentava utilizzando il documento ufficiale per eccellenza, qual è la moneta, per legittimare e fare riconoscere il *koinon* organizzazione politica unitaria.

361. SANTANGELO, Stefania, CNR- IBAM, Italy

Monete e ripostigli della Sicilia araba e normanna nel Medagliere del Museo "Paolo Orsi" di Siracusa

Nel Medagliere del Museo "Paolo Orsi" di Siracusa è presente un lotto di monete arabe e normanne, che solo occasionalmente e parzialmente è stato oggetto di studio ed attende ancora una sistematica catalogazione. Si tratta di circa centocinquanta esemplari singoli e di quattordici ripostigli monetali rinvenuti, in maniera fortuita o durante scavi regolari, nel vasto territorio un tempo posto sotto la giurisdizione della Soprintendenza di Siracusa e confluiti nel Museo grazie al lungimirante e vigile impegno conservativo di Paolo Orsi. Le monete singole islamiche riflettono la circolazione monetale dell'isola: sono

prevalentemente *rubā'ī* e *kharrube*; meno numerosi figurano i *dīnār* e i *dirhem*, e nel complesso sono riferibili alle dinastie umayyade, aghlabita e fatimita. Fra i ripostigli meritano menzione, fra tutti, un gruzzolo di 90 *rubā'ī* dell'epoca di al-Mustanşir rinvenuto a Mussomeli (Caltanissetta) nel 1923, rimasto inedito e mai segnalato fino ad oggi, e quello ricchissimo - ma recuperato in minima parte - da Castiglione (Catania), riferibile all'epoca normanna. Nel 1915 Paolo Orsi, nel rendere noti i risultati del primo censimento del materiale numismatico medioevale presente del Museo dichiarava, in calce, il suo compito: "*Ho additato ai cultori della numismatica medioevale i modesti tesori del Museo di Siracusa; tocca ora agli specialisti di meglio studiarli e farli conoscere*". A distanza di un secolo ci sembra giunto il momento di raccogliere il suo appello.

362. SANTIAGO, Javier, Universidad Complutense de Madrid, Spain

Acuñación de moneda en la España de los Austrias. Asientos para la fabricación del vellón de Carlos II

La acuñación de moneda menuda en época de los Austrias estuvo basada fundamentalmente en la firma de acuerdos (asientos) con particulares para llevar adelante la labor. En este trabajo se analizarán las condiciones concretas que se estipularon para unas emisiones mal conocidas, como fueron las correspondientes al llamado vellón grueso de Carlos II. Las primeras labores (1680-82) se nutrieron del anterior numerario de vellón, que iba siendo retirado y su metal aprovechado para la nueva emisión. Los asientos objeto de estudio se firmaron para las series batidas a partir de 1684. Fueron unas labores complicadas por el estricto ajuste entre el valor nominal e intrínseco que exigía la nueva política monetaria vigente a partir de 1680, lo cual ocasionó notables problemas para llevar adelante las labores en la cantidad suficiente para atender a la demanda del mercado monetario. La fuente fundamental utilizada para el desarrollo del trabajo es la documentación conservada en el Archivo General de Simancas, fundamentalmente en la Sección Consejo y Juntas de Hacienda, que custodia la documentación del Consejo de Hacienda y, por tanto, con amplias competencias en la política económica de la Monarquía; será complementada con la procedente de las secciones de Tribunal Mayor de Cuentas y Contaduría Mayor de Cuentas, que contienen la documentación contable de las casas de moneda.

363. SAPIENZA, Anna, Università di Messina, Italy

La triskeles e le sue varianti iconografiche: analisi diatopica e diacronica dei documenti monetali

La *triskeles*, figura emblematica costituita in genere (ma non soltanto) da tre gambe che si dipartono da un centro comune, appare per la prima volta impressa sui documenti monetali, ad Atene, nel 560 a.C., al diritto di una serie delle *Wappenmünzen*. In seguito la sua presenza si registra su monete di diverse regioni del mondo antico, dalla Persia, alla Cilicia, Pamphilia, Pisidia, Licia, Ionia, Troade e, passando per la Grecia e la Macedonia, giungendo sino in Italia, dove viene adottata, come tipo principale o simbolo secondario, sulle emissioni della Campania, Lucania, Bruttium, Sicilia e Latium. Dall'analisi dei documenti monetali si evince una continuità d'uso considerevole, ma si nota soprattutto come ogni area permesi il simbolo di una specifica valenza, politica o religiosa, che si riflette anche sulle numerose varianti iconografiche influenzate dallo specifico *humus* culturale di quanti lo utilizzano. Scopo precipuo della nostra disamina, oltre a registrare la distribuzione diacronica e diatopica del simbolo, è quella di illustrarne l'evolversi della forma, ponendo attenzione alle varianti iconiche, ed effettuando un raffronto con i coevi reperti archeologici, al fine di giungere alla piena comprensione del messaggio ideologico ad esso correlato.

364. SARCINELLI, Giuseppe, Università del Salento, Lecce, Italy

Coin finds in Puglia between Byzantium and Normans: notes on the updating of "La monetazione dell'Italia normanna" by L. Travaini

The census of coins issued between X and XII century, founded in Southern Italy (performed in the years 2013-2014 for the new edition of the book "*La monetazione dell'Italia normanna*" by Lucia Travaini), returned, with regard to the area of Puglia, pictures of attendance significantly changed if compared to what is known, both in terms of quantities of coin finds, both in relation to their geographical distribution. It emerges, in fact, from the conducted survey, the significant growth of the documentation relating mainly to the Northern and Southern Puglia, allowing growth to redesign, on a new basis, the regional mapping of coin finds of Byzantine and Norman age, and - particularly important - to document the arrival of "foreign" coinage, especially silver coins from the imperial mints of Northern Italy (particularly Lucca and Pavia) and the French denier tournois, allowing us to trace the dynamics of movement, on different scales, identify and deepen the problems.

365. SARCINELLI, Giuseppe, Università del Salento, Lecce, Italy - **ARTHUR, Paul**, Università del Salento, Lecce, Italy

Between computation and exchange: coins (and not coins) from the excavations of the Castle of Carlo V (Lecce) (poster)

Excavations carried out by University of Salento, under the direction of Professor Paul Arthur and Dr. Brunella Bruno (Chair of Medieval Archaeology), within the so-called "Torre Mozza" in the Castle of Carlo V in Lecce, have led to the recovery of a significant quantity of finds, among them, for the rarity of certificates in Italy, a "Nuremberg jeton". The finds come both from the decking of the environment is by filling a large tank and are quite consistent with each other for chronology; they provide indications of considerable interest in relation to the dynamics of attendance of the structures investigated, and document, also, the variety of attested mints, the broad horizon of exchanges and contacts of Lecce during the sixteenth century.

366. SAVIO, Adriano, Università di Milano, Italy – **LUCCHELLI, Tomaso**, Università Ca' Foscari di Venezia, Italy - **CAVAGNA, Alessandro**, Università di Milano, Italy

Giovanni Dattari, an Italian numismatist in Cairo

An exhaustive study of the life and work of the Italian numismatist Giovanni Dattari, who lived in Cairo between the last years of the 19th century and 1923, points out that he has been not only a collector of coins and antiquities, but also an expert scholar. He put together the most extensive collection of Alexandrian coins and almost monopolized the trade in ancient coins in Egypt during two decades, but also produced a number of high quality works on numismatics. His biggest achievement was without any doubt the catalogue *Numi Augg. Alexandrini*, published in Cairo in 1901, that remains a standard reference notwithstanding its defects, but he wrote also many papers on Ptolemaic, Alexandrian and Roman coinage. He partly abandoned his numismatic researches in later life to dedicate himself to cataloguing the celebrated collection of Egyptian scarabs of King Fouad that seems never to have been published.

367. SCHAAL, Katia, École du Louvre / Université de Poitiers, France

«Il faut pour le bon renom de l'Art Français que la médaille et la plaquette de 1900 soient des modèles sortant des mains de nos maîtres les plus renommés». *Genèse et réalisation des œuvres de Jules-Clément Chaplain et d'Oscar Roty*

L'année 1900 vit le monde converger vers Paris. L'Exposition universelle, organisée au cœur de la capitale, fut une manifestation où la France ambitionna de démontrer sa puissance. À l'invitation du gouvernement, chaque nation envoya une délégation de ses meilleurs ouvriers et artisans. Près de 45000 exposants étrangers furent accueillis, en plus des 38000 exposants français. À l'initiative du commissariat, il fut proposé de concevoir une médaille de récompense pour les participants primés et une plaquette commémorative accordée aux personnes ayant prêté leur concours à l'évènement. Dès la conception des objets, le caractère artistique de leur production fut à l'origine de la commande (passée par l'administration des Beaux-arts et non par le ministère du Commerce), à l'initiative du choix des artistes (on désigna les médailleurs sans passer par le concours) et au cœur de la genèse des objets (du choix du dessin à la frappe des exemplaires). C'est à la fois dans la rivalité artistique, dans la concertation financière et dans l'union pour le progrès de leur art que Jules-Clément Chaplain et Oscar Roty élaborèrent deux médailles que l'on considère souvent comme les meilleures de leur production respective. Chaplain choisit un majestueux profil de Marianne fixant, sous un chêne, le Vieux-Paris tandis que Roty convoqua le Génie du vingtième siècle pour reprendre le flambeau à l'Allégorie du dix-neuvième siècle s'endormant au pied d'un arbre: deux traitements allégoriques qui convergent vers la même conception symbolique de la médaille et deux propositions esthétiques divergentes de deux grands maîtres d'une même école.

368. SCHAUER, Yaniv, The Israel Museum, Jerusalem, Israel

Several observations on the Coinage of Agrippa II

The coins of Agrippa II (Herod the Great's great-grandson), who ruled, during the last half of the 1st century CE, as a Roman client king over vast parts of present-day Galilee and the Golan Heights, have sparked much debate over the years. The questions concentrate mainly on the date, or, in fact, dates, he used to count the years of his reign, and on the locations of his mints. Another debate concerns the year of Agrippa II's death. Since the king minted coins almost every year of his reign, with the last date being the 35th year, the question of the different eras he used has a direct bearing on this manner. Most of

Agrippa II's coin designs sought to glorify the Flavian emperors' victory over the Jewish rebels in the First Jewish War, but the king also minted other types. The aim of this paper is to show that the question of the location of the king's mints may be answered by examining and comparing his coin types with one another, as well as with coins of different periods from cities that were under his control. Such comparisons may enable us to locate Agrippa II's other mint (besides the mint at his capital Caesarea Panias). They may also shed light on the years that he considered to be the beginning of his reign and the year of his death.

369. SCHINDEL, Nikolaus, Austrian Academy of Sciences, Vienna, Austria

The Coinage of Khusro I and Ohrmazd IV

The paper discusses the main elements and developments of the coinage of these two important Sasanian kings. With the near completion of *Sylloge Nummorum Sasanidarum* vol. 4, a detailed treatment of these so far little studied parts of Sasanian imperial coinage can be provided. One central point is tracing the developments in output per mints, regions, and regal years, since this not only reveals the structure of the coinage system, but also provides us with insights into historical and economic developments otherwise only faintly attested. A second, innovative topic is style analysis which enables us to better understand the underlying patterns of actual mint production, and the system of central die production.

370. SCHINZEL, Christian, Kantonsarchäologie Solothurn, Switzerland

Coin Finds in the Swiss Canton of Solothurn and Roman Hoards

The aim of the paper will be to give an overview of the coin finds in the Swiss Canton of Solothurn, presenting numbers and historical distribution and also laying emphasis on Roman coin hoards. The history of recorded coin finds in Solothurn begins in 1524, when the pastor of Lostorf discovered a buried pot filled with Roman coins. Naturally none of these coins are still comprehensible today. However, 200 years later, when one of the towers of the St. Urs Cathedral in Solothurn collapsed, a hoard of about 200 silver coins from the 10th century was revealed. Out of these, eight have survived until today. From around the middle of the 19th century, and especially at its end, the records of coin finds increased rapidly. This, of course, is strongly connected with the foundation of schools, historical societies and museums, which led to increased historical consciousness and the wish to preserve this history as well as the construction of factories, railroads, and landscaping efforts in these years. Since 1931 the protection and conservation of antiquities and historical monuments are in the responsibility of the state, but it took another 26 years until the first "Kantonsarchäologe" was formally appointed. While earlier archaeological enterprises were organized by local museums or societies, they were from now on centralized in the hands of this institution (Kantonsarchäologie), including all finds and therefore also all found coins. Furthermore, the five known Roman hoards found in the Canton of Solothurn will be presented.

371. SCHOLLAARDT, Christel, ICOMON, The Netherlands

ICOMON: purposes and goals

Since its founding, ICOMON strives to be a platform on the museological aspects of numismatic collections. We have a website with curators' manuals, all proceedings of our annual meetings, and so on. With more than 100 members, we have a platform to exchange ideas and means. This can be very useful nowadays, in times of recession. Many numismatic museums and collections are endangered. Together we can form a factor.

372. SCHUBERT, Helmut, Frankfurter Numismatische Gesellschaft, Germany

Johann Gottfried Seume (1763-1810) e il Kurantgeld a Siracusa nel 1801-1802

Chi oggi viaggia da Grima (Sassonia) a Siracusa, fa uso della moneta, l'euro. Ci sono anche carte di credito di vario genere, come, ad esempio, Visa o American Express. Al tempo di Seume non era molto diverso. Johann Jacob Volkmann ha scritto una guida in tre volumi "Messaggi storico-critici dall'Italia ..." (Lipsia 1770-1771) che è una buona risorsa per conoscere il numerario necessario per le spese quotidiane. Sulla base del viaggio di Seume vogliamo mostrare come egli si sia comportato in rapporto alle diverse valute.

373. SCHWEI, David, University of Cincinnati, United States of America

Forgers' Misunderstanding of Roman Coin Types

Historians and numismatists have often debated the significance of the topical, commemorative publicity in Roman coin types, and an important part of this debate is how intelligible the types were to the inhabitants of the empire. Scholars have relied on literary sources that primarily refer to coins' portraits, not the legends and rarely the reverse types. In this debate, the numismatic evidence has been relatively neglected or used too speculatively. This paper will examine ancient forgeries of the coinage struck for Cassius, the assassin of Julius Caesar, in order to understand how well the messages of the coins were understood. Forgeries offer a unique perspective on the intelligibility of coin types: they reveal how well the forger understood the coin's types and message. An ongoing die study of Cassius's coins reveals how forgeries were made with hubs of coins and with forger's dies. The coins produced by both methods reveal that the forgers carefully reproduced visually similar coins, but they did not understand the legends. This confusion and their process show that the forgers did not understand the coins' messages, especially if the significance of the types was revealed through the coins' legends. The paper will show, then, that many inhabitants of the empire did not understand the coins' messages, sometimes due to illiteracy.

374. SCREEN, Elina, Fitzwilliam Museum, United Kingdom

Anglo-Saxon coin imports to late Viking-age Norway: the die-linking evidence

Anglo-Saxon, German and other Western coins reached Norway in considerable numbers in the late Viking age, c. 980-1050. The reasons behind the importation of the coins (were they the result of trade, tribute payments or Viking raiding?) and the routes along which the coins came to Norway have been much debated. An examination of the die-linked coins in the Fuglevik, Slethei and Årstad hoards offers new evidence for the importation of 'parcels' of coins from Anglo-Saxon England, and how coins moved around once they reached Norway. Together with evidence for the different proportions of German coins from the regions of Cologne, Frisia, Franken and Sachsen, this allows a new model to be presented for the directions of coin imports into Norway, c. 980-1050, emphasising the probable role of imports along the Channel coast, together with links through Denmark and the Baltic.

375. SELKE, Valeria, Germany

Ein tetrarchisch- constantinischer Münzhortfund aus Meckel/Lkr. Eifelkreis Bitburg-Prüm, Rheinland Pfalz (poster)

Der Münzschatzfund von Meckel/Lkr. Eifelkreis Bitburg-Prüm, Rheinland-Pfalz wurde im Jahr 2010 ca. 20 km nördlich der ehemaligen spätantiken Kaiserresidenzstadt Trier gefunden. Mit einer Menge von ca. 7800 Münzen überwiegend von der diocletianischen Münzreform 294 n. Chr. bis ca. 313/315 n. Chr., die größtenteils in den westlichen und zentralen Münzstätten geprägt wurden, zählt er zu den größten bekannten Hortfunden dieses Zeitraums. Der gesamte Fund soll ab Frühjahr 2015 in einem zweijährigen Projekt bearbeitet werden (Rheinisches Landesmuseum Trier, Ludwig-Maximilians-Universität München, Staatliche Münzsammlung München). Der Schwerpunkt der Auswertung soll dabei auf der Münzstätte Trier liegen, deren Prägungen den größten Teil des Schatzfundes bilden und für die sich unter den bisher bestimmten Münzen die meisten neuen Varianten bzw. Typen finden. Die weitere numismatische Auswertung soll sich vor allem den westlichen Münzstätten, besonders der Gruppe der Folles ohne Münzstättenzeichen, widmen und durch metrologische Untersuchungen und Metallanalysen gestützt werden. Die Einordnung des Fundes in seinen archäologisch-historischen Kontext soll die Bedeutung und den Quellenwert des Fundes für die Region Trier zu Beginn der Spätantike herausstellen.

376. ŠEMROV, Andrej, Narodni muzej Slovenije, Ljubljana, Slovenia

The pseudo-monetary means found in the territory of Slovenia

In the territory of Slovenia were the earliest pseudo-monetary means of payment bronze ingots and *aes grave*. In the last few years have been found some new pieces of those objects that change the view and our understanding of the time before an intense coin circulation in the area.

377. ŠEPAROVIĆ, Tomislav, Museum of Croatian Archaeological Monuments Split, Croatia

Some Notes on Byzantine Coins from the 7th–9th century found in Croatia

One of the topics discussed in this paper is the hoard of gold Byzantine coins found during the archaeological excavations at the eastern outskirts of the ancient Salona. This hoard presents a significant testimony of Avar-Slavic invasions but it also explains a social and political situation in Salona of the first half of the 7th century. Further, some newly found gold coins from the 8th century could be brought in relation with the other finds of numerous gold *solidi* of Constantine V Copronymus, which were minted in Syracuse. After almost two centuries of very modest numismatic finds, the occurrence of these coins has exceptional archaeological and historical value within the context of the earliest history of the Croats. Finally, a significant number of gold *solidi* of Emperor Theophilus, from the first half of the 9th century, were documented in the area of the eastern Adriatic coast. Their inflow to this region could be interpreted as a result of the economic and political cooperation between Byzantine towns and the Croatian inland.

378. SHAVAREBI, Ehsan, University of Tehran, Iran

The So-called “Thronfolgerprägung” of Ardashir I reconsidered

The first Sasanian King of Kings Ardashir I (224–241 AD) has a coin-type representing two busts on its obverse (type VIII in *Sylloge Nummorum Sasanidarum*). The left bust shows Ardashir in profile looking right wearing his crown with his conventional coiffure. The bust on right, a beardless man wearing a kulāf, is traditionally interpreted by a great majority of scholars as Shāpūr, the crown-prince. There is however no trustworthy witness to demonstrate this traditional identification. The sole reason for this identification was an uncertain reading of the obverse legend as the name Shāpūr, which has correctly been invalidated by Michael Alram. He interprets this coin-type as another representation of the same beardless person depicted on Ardashir's rock reliefs. The beardless figure on the reliefs has already been identified as Abarsām, a very close dignitary to Ardashir, who is mentioned in the inscription of Shāpūr on the Ka'ba-i Zardusht (ŠKZ) with the honorific title of “Ardashir-farr”. He also plays a key role in a narrative described by Ṭabarī, according to whom Abarsām led the military troop which conquered Khuzistan before 224 AD, when Ardashir ascended the throne. He also trained Shāpūr when he was a child. Dīnawarī, an early Islamic chronicler, and Ferdowsi, in *Shāhnāme* (the Book of Kings), inform us of a command of Ardashir to dedicate a grand estate to Abarsām and place his image on the coins as a token of appreciation. This account has never been considered by previous scholars, while it could be an effective clue to understand this enigma.

379. SIDIROPOULOS, Kleanthis, Excavation and Restorations Project of Ancient Messene, Greece

Messenian cults: the numismatic data and the archaeological evidence

Messenian numismatic iconography, known in its broad outline, is expressed through an output with a chronological range from the 4th c. BC to the Severan age, with gaps, unevenly distributed in time and among the various issuing cities: Messene, Thuria, Korone, Pylos, Kyparissia, Kolonides, Asine. The aim of this paper is to present the numismatic types associated with local cults as a unified whole, evaluating their resistance to time, their distribution, their particular features and their ideological background, in relation to the historical contexts of the autonomous (in Hellenistic times) or dependent (Roman-period) cities, and to the much-discussed issue of the constructed or self-existent “national identity” of the Messenians. On a second level, the numismatic data and conclusions are juxtaposed with the finds from recent excavations in the area, which have brought to light architectural remains, inscriptions and small finds of various types, directly or indirectly connected to cult. Comparing all the sectors of public life that express religious choices and priorities while simultaneously stating Messenian identity (coinage - temples, inscriptions, dedicatory offerings, nomenclature) with those of “others”, leads to a series of more general observations on the history of the area, founded on a knowledge base that is, perhaps, rendered more secure by up-to-date excavation evidence.

380. SIEGL, Kathrin, Österreichische Akademie der Wissenschaften, Austria

Der janusköpfige Kaiser – Die Medaillonprägung des Commodus (177-192 n. Chr.) als Medium kaiserlicher Repräsentation (poster)

Commodus zählt wohl zu den rätselhaftesten Kaisern des Römischen Reiches. Bisher stützte sich die historische Forschung zu seiner Person in erster Linie auf Textquellen; die numismatischen Quellen und speziell die Medaillons wurden hingegen kaum herangezogen. Auch von numismatischer bzw. archäologischer Seite fanden die Medaillons des Commodus bislang überraschend wenig Beachtung. Mein Dissertationsprojekt soll diese Forschungslücke schließen. In ihm werden die unter Commodus geprägten Medaillons systematisch-kritisch erfaßt und in ikonographischer Hinsicht untersucht. Auf dieser Grundlage werden sie in ihren historischen Kontext gesetzt und darin interpretiert.

381. SIMMONS, Frances, Simmons Gallery, United Kingdom

Commissioning success - commerce and the art medal

Many of the medals extant from late 19th century onwards are prizes, given not only by the state but also by commercial institutions. The designer of the medal has to reconcile the needs of the commissioning body with their own artistic style, often having to find new images to convey the modern world, its gadgets and preoccupations. This paper looks at the problem as evidenced in medals from the Art Nouveau and Art Deco periods onwards. Solutions are still hard to find today but contemporary medallists have produced innovative awards which please clients and preserve the artistic integrity of the medallist. Examples are also given from commissions with which the author has been involved.

382. SINISI, Fabrizio, Austrian Academy of Sciences, Austria

Typological formulae and royal effigies in Arsacid numismatics: the case of Phraates IV and Tiridates

Parthian numismatic studies have been long dominated by the lack of a systematic approach. This has translated into the absence of any effort at detecting and defining in detail specific conventions and *formulae* in the typological selection and their patterns of employment throughout different phases. Systematic analysis in the framework of a structural reconstruction is now at the core of the *Sylloge Nummorum Parthorum project (SNP)*, providing a completely different perspective. The presentation will deal with Arsacid royal imagery, focusing on the series of the late 1st century BC against the background of a general assessment of the typological development. The coin issues of Phraates IV and Tiridates, object of a long debate in Parthian numismatic studies, will be discussed in detail thanks to the data produced by the work so far done on *SNP V*, which will cover the years 38 BC-AD 6. The result will be a reliable picture of all the typological features identifying the respective series, well illustrating the impact of data obtained from systematic analysis on attributions and historical reconstruction.

383. SISALLI, Barbara, Università di Messina, Italy

Incontri di ninfe con centauri e satiri: "riti sociali" sulle monete tracomacedoni

Il documento monetale rappresenta per le tribù trache l'unica fonte autoctona di cui disponiamo e costituisce, quindi, un imprescindibile campo di indagine per la ricostruzione degli aspetti economici, politici e sociali di queste comunità tribali. In particolare, si propone una lettura interpretativa dell'iconografia del ratto di una ninfa ad opera di un centauro sui didrammi e le dracme con legenda ORRESKION, che mostrano sorprendenti analogie con la coeva monetazione di Thasos, in cui la medesima scena ha come protagonista maschile un satiro. Il legame delle monete degli Orresci con le emissioni dell'isola è sottolineato anche dall'analogo sistema ponderale di riferimento e dagli stessi canali di circolazione. Lo studio dei documenti monetali evidenzia, inoltre, una relazione con la cosiddetta monetazione di Lete che presenta al D/ l'iconografia del corteggiamento di una ninfa ad opera di un satiro. Anche per queste emissioni si ipotizza un'attribuzione a zecche tribali trache, sulla base delle forti somiglianze nelle scelte tipologiche, che sembrano afferire ad un patrimonio culturale comune. Si propone di mettere in relazione i tipi monetali menzionati con i rapporti economici e politici che nel tempo vennero ad instaurarsi tra le popolazioni native e i colonizzatori greci, rapporti che nel tempo furono mediati da unioni coniugali miste, verosimilmente preceduti da pratiche di "avvicinamento", adombrate dalle scene di corteggiamento.

384. SMAGUR, Emilia, Jagiellonian University in Krakow, Poland

So similar and yet so different. The iconography of Kushan pantheon

The pantheon of deities depicted on Kushan coins is rooted in the Indian and Bactrian traditions. However, strong influences of Indian religion are recognizable as well. Coin types are often used as an evidence for a discussion of Kushan royal attitudes

and beliefs. Nevertheless, it is important to notice that the continuity in iconography and symbolic imagery does not necessarily imply continuity in mythology. The already existing visual language of arts and coinage was used by the Kushans for recording their own messages. Many deities bear the iconographic features of deities already known in the territory ruled by the Kushans yet these gods are different. In this paper I pose the question: which of the elements of the official iconography of Kushan deities are not just a symbolic elements, but semantic markers that characterize the nature of these images in their cultural context. Moreover, I will discuss the sufficiency of applying the “kingly reading” (which was shaped, among others, by the coinage) and the “artefactual reading” approach for analyzing the relationship between the official royal religion and the beliefs of Kushan subjects. The latter can be read through the terracotta figurines, which have been chosen as archaeological indicators of their religion. Therefore, the problem of similarities in the interpretation of Kushan divine images will be approached.

385. SMELY, Tomas, Czech Republic

Foreign Influences on Boian Coins Iconography

Celtic coinage of Bohemia, Moravia, Silesia, Lower Austria and Western Slovakia is with minor exclusions connected with the Boians, or more precisely with Celtic tribes which belonged to the Boian community. The foundations of the so called Boian coinage were most probably laid in the first half of the 3rd century BC. The oldest Boian coins, perhaps from the Bohemian region, are considered to be golden staters copying staters of Alexander the Great. In the last third of the 3rd century BC, an expanded minting of golden staters and 1/3, 1/8 and 1/24 of a stater with motifs of the Greek goddess Athena-Alkidemos was started mainly in Lower Austria and Moravia. Also the iconography of the oldest Boian silver coins minted in Western Slovakia and Lower Austria was highly influenced by the Greek coins. In the 2nd century BC, the minting of Celtic coins in Bohemia was very rich and variable with motifs which are considered to be local and not strongly inspired by the more developed Southern regions. From the 2nd century BC onwards, there were motifs common to a wide territory of west-European Celtic coinage found on some silver and golden Boian coins. Traces of the Greek influence in Boian coinage were disappearing concurrently. During the last stage of Boian coinage, which was connected mostly with the *oppidum* of Bratislava in the middle of the 1st century BC, a strong influence of Roman motifs was highly noticeable.

386. ŚNIEŻKO, Grzegorz, Polish Academy of Sciences in Warsaw, Poland

The plague of forged coins – counterfeits of the copper shillings of Polish–Lithuanian Commonwealth in the second half of 17th century

Between the years 1659-1666, King John II Casimirus emitted a great amount of copper shillings (officially more than 1 570 000 000 coins). Thanks to the surname of their main manufacturer – Tito Livio Burattini (born in Agordo – Italy, in Poland known as Tytus Liwiusz Boratini), they are called “boratynki”. In this paper, as counterfeits, were classified specimens imitating mentioned above shillings. Those coins were produced using the medieval method of hammering. They had simple images and legends, what in combination with an easy access to the copper (for example sheet roof from churches and secular buildings ruined during the Swedish Deluge 1655-1660) made them easy to counterfeit. It was scrupulously exploited by people. Those coins were struck by the noble and poor ones, what has a reflection in the written sources from the 17th and 18th centuries. The Polish–Lithuanian Commonwealth was also flooded with counterfeits issued in neighboring countries. The copper shillings circulated more than a hundred years (till the 1766). With the passage of time, counterfeits were gaining still bigger participation in circulation. On the basis of coin analysis, three groups of counterfeits were distinguished: 1. imitating concrete mints – they have correct legends, mints tenants and treasurers signs; 2. with correct legends, but without a proper mint signs, which are often lacking; 3. barbarized, which coin dies were made by illiterate engravers. In this paper, an attempt will be made to determine the sources of the counterfeits and to set the techniques of their production.

387. SOLE, Lavinia, Università di Palermo, Italy

Il ripostiglio IGCH 2132 da Gibil Gabib: proposte per una rilettura

Il contributo intende presentare, per la prima volta, lo studio analitico di tutte le monete facenti parte del ripostiglio IGCH 2132, scoperto negli anni Venti del secolo scorso nell’antico insediamento anellenico di Gibil Gabib, presso Caltanissetta (Sicilia) e conservato presso il Museo Archeologico “Paolo Orsi” di Siracusa. Lo studio è finalizzato ad inserire il complesso nell’ambito delle dinamiche di circolazione e uso della moneta nella Sicilia centrale durante l’ultimo trentennio del IV sec. a.C., periodo che tanta letteratura archeologica del secolo scorso considerò permeato dalla c.d. “rinascita timoleontea”. Attraverso la documentazione del complesso monetale e altre evidenze numismatiche e archeologiche, si proporrà un

approccio interpretativo diverso per delineare il quadro storico della Sicilia centrale nel corso degli ultimi trenta anni del IV secolo a.C.

388. SPAGNOLI, Emanuela, Università di Napoli, Italy

Piombi monetiformi da Ostia e Porto: problematiche interpretative

L'impiego del piombo per specie monetiformi è ben documentato nel mondo antico, ma resta ancora poco definito il quadro interpretativo e funzionale di alcune classi di oggetti (tra i quali tessere, gettoni, sigilli) destinati ad ambiti di circolazione locale e/o extra-regionale. Questo studio analizza un nucleo di materiali inediti da contesti di Ostia e del *Portus Romae* con il proposito di discuterne le problematiche interpretative sotto il profilo storico-giuridico e funzionale, nel quadro dello sviluppo socio-economico di questa vasta area territoriale in età romana.

389. SPECHT, Edith, University of Vienna

A Medal for Books

The paper is on an intriguing medal by J.J. Barré, with an engraving from 1826 bearing the name of the buyer of the "*Description de l'Egypte*....". The medal was for the second edition of the corpus, published between 1821 and 1828 in 24 (+ 15) volumes, by C.L.F. Panckoucke in Paris. The very beautiful medal provides also information on the state of studies in Egyptology in its beginnings.

390. SPINELLI, Marianna, Università di Messina / Università della Calabria, Italy

La dea "regale" di Locri Epizefiri

Si propone l'analisi di una rappresentazione iconografica posta al rovescio di una moneta bronzea di Locri Epizefiri, caratterizzata da una figura femminile in trono avente nelle mani una *phiale* e uno scettro terminante con capsula di papavero. La particolarità della moneta è legata al seggio su cui siede la donna poiché ha le gambe anteriori a forma di zampa posteriore di animale (leonina, bovina e/o equina). Da qui la necessità di comprendere quando e per quale motivo questo tipo di trono sia apparso nel mondo antico, e quali possano essere stati i suoi modelli. Attraverso l'applicazione del metodo del *Lexicon Iconographicum Numismaticae*, si è ritenuto opportuno ripartire il lavoro in più fasi: 1) raccolta dei documenti ed evidenziazione della distribuzione diatopica e diacronica del trono con i piedi a zampa di animale con relative mappe di diffusione (elaborate con il *Digital Iconographic Atlas of Numismatics in Antiquity* dell'Università di Messina); 2) individuazione dei personaggi che siedono su questo tipo di seggio; 3) confronto degli attributi della donna e dei simboli presenti nel campo monetale con immagini analoghe di serie monetali di altre zecche (occidentali ed orientali). Tutto ciò per cercare di cogliere analogie iconografiche che possano contribuire all'identificazione della figura femminile locrese che - per il solo fatto di essere seduta in trono - è detentrica di un potere regale, e che per gli attributi che reca in mano non può che avere natura divina.

391. SPUFFORD, Peter, University of Cambridge, United Kingdom

Economic Effects of Debasements

In my paper at the International Historical Congress in Utrecht in 2009 I spoke about the economic effects of debasements of coinages and of returning to sound money, in England in the 1540s and in the Burgundian Netherlands in the 1480s and 1490s. What became apparent to me was that prices between countries depended then, as now, on exchange rates, and that these were related not to the actual precious metal content of the base coins for moneys of account, which modern numismatists know, but contemporaries generally did not, but to the price for bullion offered by mints, which contemporaries did know, and numismatists often do not. The scale of imports and exports, then as now, often depended on the prices of the goods imported and exported. From that came the growth and collapse of some manufactures, moves towards import substitution, and eventually pressures on rents and wages. I should like to extend this Anglo-Burgundian analysis to other countries in late medieval Europe. In doing so I shall naturally use what I wrote myself in *Money and Its Use*, which incorporated what had earlier been written by other scholars, for example by Hans Van Werveke on mid-fourteenth-century Flanders, and by Angus Mackay on fifteenth-century Castile. Although this will not be strictly a numismatic paper, but an economic history paper, it will be entirely underpinned by mint evidence.

392. SQUIRES, Donald, United States of America

An Unpublished Transitional Hyperpyron of John III Vatatzes

Michael Hendy in the *Dumbarton Oaks Catalogue (DOC)* identified two main series of *hyperpyra* of John III Vatatzes, the First Coinage and the much more extensive Second Coinage as well as Transitional Coinages A and B between the First and Second Coinages. The subject coin of this paper is an example of Hendy's Transitional Coinage B, perhaps only the fourth or fifth example known, counting the two examples cited by Hendy, another example acquired by Dumbarton Oaks after the publication of the *DOC*, as well as a coin cited by Eleni Lianta, in her article "*John II Comnenus (1118-43) or John III Vatatzes (1222-54)?*" from the Vrasta Hoard. The three coins previously published as well as the example now in the Dumbarton Oaks collection are similar to each other and may well be die-linked. The unpublished *hyperpyron* is struck from very different dies. Its obverse and reverse inscriptions are fuller. It is more carefully struck and is arguably of a more refined style. The existence of this *hyperpyron* has implications for the magnitude of the Transitional Coinage B at the very least. It may also have implications as to whether Hendy's First Coinage and the two Transitional Coinages should be re-attributed to John II, as Dr. Lianta has argued.

393. STAFFIERI, Giovanni Maria, Circolo Numismatico Ticinese, Lugano, Switzerland

I ritratti senza corona sui bronzi imperiali alessandrini

Nell'ambito dello studio dei ritratti delle coniazioni alessandrine emerge una particolarità rara che interessa quelli delle emissioni bronzee degli Augusti a partire dall'anno 18 di Adriano (133-134 d.C.) fino al terzo anno di correggenza di Commodo con Marco Aurelio (sotto l'anno 19 di quest'ultimo: 178/179 d.C.), passando attraverso i regni di Antonino Pio e Lucio Vero. Un breve arco di tempo di 45 anni che ci fornisce una serie di ritratti dall'incisione particolarmente accurata e con alcune altre caratteristiche che li distinguono dai numerali bronzee con ritratti coronati. Non rientrano, nel periodo di cui ci occupiamo, i bronzi emessi a nome e con ritratto nudo dei Cesari Elio Vero e Marco Aurelio che, ovviamente, in questa funzione non portano alcuna corona. La comunicazione introduce questa tematica mai finora affrontata, nell'attesa di pubblicare il catalogo ragionato e aggiornato delle monete in oggetto che è in allestimento.

394. STAHL, Alan, Princeton University, United States of America

The Antioch Excavation Coins Re-excavated

About 40,000 coins excavated at Antioch-on-the-Orontes in the 1930s were sent to Princeton at the outbreak of World War II, where they remain. While exemplary catalogues of these were published in the following decades by Miles and Waage, there was little or no effort to tie the coinage to the other excavated material or the history of the site. The re-examination of the archaeological archives and artifacts also at Princeton has occasioned a review and re-cataloguing of the coin finds, which have provided much new information on the chronology and use of the site from Hellenistic through Ottoman times.

395. ŠTEFAN Jan T., Czech Republic

Portraits Bohemia numismatics from the earliest times to the late 18th century (poster)

The paper will show contemporary, fictional and idealized portraits of Bohemia numismatics from the earliest chronicler Kosmas the turn of the 11th and 12th century to the contemporaries of the founder of Bohemian science of numismatics Nicholas Adaukt Voigt. Determine the level of competence in the category "numismatist", omit the rulers for their specific focus on the field of numismatics and finance, we estimate the authenticity of portraits and some show their archetype. Taking into account the earlier portraits graphics (drawing, woodcut, copper engraving, lithography) and oil painting 18th and 19th century. We present portraits of such personalities: Kosmas (1045?-1125), František Pražský (1290?-1362), Neplach, (1322-1368), Václav Hájek (?-1553), Jan Doubravius, 1486?-1553), Jan Mathesius (1504-1565), Tomáš Jordan (1539-1585), Mikuláš Dačický (1555-1626), Jan Amos Komenský (1592-1670), Pavel Stránský (1583-1657), Bohuslav Balbín (1621-1688), Tomáš Pešina (1629-1680), Jan Weingarten (1629-1701), František Beckovský (1658-1725), Jan Jiří Středovský (1679-1713), Bonaventura Piter (1708-1764), František Josef Pachta (1710-1790), František Antonín Sporck (1662-1738), Josef Petráš (1714-1772), Emanuel Arnošt Waldsteina (1716-1789), Gelasius Dobner (1719-1790), Karel Egon Fürstenberg (1729 -1787), Mikuláš Adaukt Voigt (1733-1787), Marie Anna Habsbursko-Lotrinská (1738-1789), Stanislav Vydra (1741-1804), František Martin Pelcl (1734-1801), Karel Ungar (1743-1807), Johann Peithner von Lichtenfels (1727-1792), Jan Vavák (1741-1816),

Leopold Scherschlik (1747-1814), Josef Dobrovský (1750-1829), Quirin Mickl (1747-1767) a Herrmann Kurz (1767-1795). For each nominated we will benefit for his numismatic research.

396. STEFANAKI, Vassiliki, Greece – CARRIER, Caroline, France

Analyse du système monétaire crétois de l'époque hellénistique: le cas des monnaies de bronze

Les différents modules de bronze utilisés par les cités grecques et les dénominations auxquelles ils se réfèrent, selon l'étalon monétaire en vigueur, restent difficiles à identifier. Dans le cas de la Crète, les récentes études consacrées aux séries émises par plusieurs cités (Kydonia, Polichne, Kéraia, Polyrhénia, Oréioi, Kantanos, Phalasarna, Ariaioi, Cnossos, Gortyne, Viannos, Malla, Hiérapytna et Itanos) présentent les sources nécessaires à l'élaboration d'une synthèse sur le système en vigueur pour les monnaies de bronze de l'île. Un seul système semble en effet avoir été utilisé, à la fois pour l'argent et le bronze. C'est un étalon monétaire commun aux différentes cités, l'étalon crétois (influencé par l'étalon éginétique ou attique) qui est utilisé. Par ailleurs, les modules de bronze frappés par les différents ateliers à l'époque hellénistique sont assez similaires. Ce système unique est mis en œuvre de façon différente par les cités suivant les périodes et les besoins. Afin de mettre en évidence son évolution, nous présenterons dans un premier temps une chronologie relative des différents modules utilisés en Crète puis, dans un second temps, nous essayerons de définir leurs valeurs nominales.

397. STELLUTI, Napoleone, Italy

Monete della zecca di Aesernia, Venafrum, Bovianum e Aquilonia, revisioni e aggiornamenti

L'autore, dopo il contributo prodotto sulla Zecca di FRENTVRM, LARINVM e PALLANVM per lo scorso congresso di Glasgow, ha voluto prendere in considerazione un'altra area limitrofa al Sannio Frentano nel III sec. a.C., il Sannio Pentro, corrispondente all'attuale Molise, per la quale si stima sono rilevabili oltre 200 esemplari da collezioni private e pubbliche dei maggiori musei del mondo. Per cui era necessario operare un'esplorazione analitica e complessiva di tali esemplari con relativa revisione e aggiornamento degli studi finora effettuati.

398. STITI, Kemal, CNRA, Algeria - PELLÉ, Richard, INRAP, France

Il deposito monetario dello scavo archeologico della Place des Martyrs ad Algeri

Nel 2014, un deposito di 385 monete è stato trovato nello scavo archeologico della Place des Martyrs ad Algeri (Algeria), nascosto in un'officina d'artigiano. Questo lotto è costituito da monete d'argento spagnole, dei reali, emesse tra il 1562 e il 1630, durante i regni di Filippo II, III o IV. La composizione del deposito si divide in 255 monete di otto reali, 88 di quattro reali e 42 di due reali. Un tipo solo è rappresentato con molte varianti della leggenda; si tratta per il diritto dello scudo coronato e, per il rovescio, del campo squartato delle armi di Castiglia e Leon in doppio octolobo. Diverse zecche ispaniche e sudamericane sono identificate ogni tanto con tipi sconosciuti. Se alcuni esemplari sono di fattura e di coniazione accurate, la maggior parte è ruvidamente realizzata. L'importanza del lotto permette d'approfondire lo studio delle tecniche di coniazione spesso poco documentate. Per un peso totale di 8384,69 g di argento, la valutazione del lotto è di 2476 reali contro soli 2442 in valore teorico, differenza alquanto limitata. Nonostante le notevoli irregolarità di coniazione, c'è una precisione nel peso di ogni individuo con deviazioni standard molto basse, indicando un rigoroso controllo dell'autorità emittente. Questa valuta molto importante, l'omogeneità e la provenienza del deposito, il TPQ ottenuto sembrano escludere una tesaurizzazione o un acquisto commerciale, ma suggeriscono la cattura di una nave incaricata del trasporto del denaro o il versamento di un riscatto pagato a corsari algerini intorno all'anno 1630.

399. STOLYARIK, Elena, American Numismatic Society, New York, United States of America

The Coinage of the Scythian Kingdom in the Dobruja: The Evidence of Coin Finds and Monetary Circulation

In antiquity the Dobruja (the delta at the Danube's mouth and the West Pontic Region) served as a bridge between the Balkans and the Pontic Steppes. To the ancient historians this area was known as Scythia Minor. The rulers are known only from the numismatic and epigraphic evidence. An analysis of the coin finds is thus essential to understand the history of the Dobruja. The close similarity in the technical details of the various coin types of the different communities confirms that the West Pontic cities permitted their mints to be used by the Scythian kings. Moreover, Scythian issues bear countermarks that replicate the autonomous coinage of the Greek cities. This paper looks at the evidence for the zones of circulations of the coins

of the Dobrujan Scyths. The distribution of coin finds and the presence of countermarks of the Greek cities of the West Pontic region demonstrate where the coins of the Scythian kings were in use and how this changed. This numismatic material not only demonstrates how the Scythian rulers articulated their aspirations as powerful monarchs of the Hellenistic world, but also explicates the economic development of the region. It thus provides a basis for an advanced study of the entire complex of monetary circulation in the region, one of the most important contact zones in the Ancient World.

400. STOYAS, Yannis, KIKPE Numismatic Collection, Greece

Gorgoneion shield and athlete: A gold issue of Syracuse reconsidered

The focus of this study is directed on a gold coin issue of Syracuse (*gorgoneion* shield / athlete with strigil), of which there is only a handful of extant specimens. Based on the weight of the known gold pieces (around 3.48 g), an estimated value of four *litrai* has been inferred for the denomination. Following the standard view commonly accepted in scholarship, propounded by C. Boehrer more than twenty years ago, this Syracusan issue should be dated in 406 BC; however for a number of reasons such a chronology seems to be rather untenable. Through careful examination of the iconography, stylistic and other elements are analyzed, leaving open a downdating of this rare coin emission. Moreover, reconsideration of the historical events as well as insights gained from literary sources can provide clearer perspectives concerning the interpretation of the coin types — particularly the extraordinary use of the athlete — and regarding the grounds on which the gold issue in question was produced. An attempt is made to look also at the broader picture by taking also into account some other Syracusan coin issues of possible relevance in terms of iconography and metrology. It appears that considerable evidence weigh the balance towards a dating in the years of the rule of Dionysios I.

401. STROOBANTS, Fran, Royal Library of Belgium

The civic coin production at Sagalassos (SW Turkey)

The city of Sagalassos, located in the region of Pisidia (SW Turkey), witnessed an abundant coin production during Hellenistic and Roman Imperial times. Recently, this coinage became one of the topics of a PhD research focusing on the monetary history of Sagalassos and its region on the long term. Based on data from main collections and auction catalogues, an entire corpus was made of the coinage minted in name of the city. This paper wishes to present this material, and to interpret it within its broader historical, economical and archaeological context. What do die-studies tell us about the quantity of production, and how can important evolutions, like the significant rise in coinage during the second half third century AD, be explained? Which denominational and metrological system was used, and how was this affected by the evolution of the Roman imperial coinage? Which images did the people of Sagalassos present on their bronze coins, and what does this tell us about their identity? What can we learn about the history of Sagalassos regarding its coin production, and *vice versa*? In the end, it will become clear that the study of the city's coinage will shed some new light on some unclear passages of the history of Sagalassos and its wider region.

402. SUSPÈNE, Arnaud, Université d'Orléans / CNRS, France - **BLET-LEMARQUAND, Maryse** CNRS / Université d'Orléans, France - **BOCCIARELLI, Dorian,** Université François-Rabelais, Tours, France

Les monnaies d'or des années 68-69 apr. J.-C.: l'apport des analyses élémentaires

La campagne d'analyses élémentaires de monnaies romaines en or réalisées par le laboratoire IRAMAT-CEB au moyen de la méthode LA-ICP-MS sur les collections du Département des Monnaies, médailles et antiques de la Bibliothèque nationale de France a été l'occasion d'entreprendre une recherche approfondie sur les *aurei* de la guerre civile des années 68-69 apr. J.-C. Dans le cadre de cette campagne, cinquante-six *aurei* de l'année des quatre empereurs ont été analysées, permettant ainsi une meilleure compréhension d'un monnayage qui est encore en grande partie mal connu et dont deux des principales caractéristiques sont la difficile question de l'officialité du monnayage des révoltés et la multiplication du nombre des ateliers temporaires dans les provinces occidentales. Si Galba et Vitellius ont fait frapper dans les ateliers de Tarraco (?) et de Lyon des monnaies dont le titre et la composition sont semblables à ceux que l'on constate dans l'atelier romain, les monnaies anonymes de la guerre civile, en revanche, s'en distinguent assez nettement. La composition métallique de certains *aurei* à l'effigie du divin Auguste semble d'ailleurs correspondre à celle des monnaies en or frappées par Vespasien dans la province d'Hispania. Grâce à ces éléments, la répartition des monnaies anonymes de la guerre civile dans le temps et dans l'espace va pouvoir être précisée et modifiée.

403. SVENSSON, Roger, Research Institute of Industrial Economics, Stockholm, Sweden

Periodic Re-Coinage as a Monetary Tax: Conditions, Consequences and Comparisons with Debasement

Periodic re-coinage implies that old coins are declared invalid and exchanged for new ones at publicly announced exchange rates and dates. Empirical evidence shows that such re-coinage could occur as often as twice a year within a currency area in the Middle Ages. The exchange fee at re-coinage worked as a monetary tax for trade and inhabitants. The main purpose here is to set up a theoretical framework about periodic re-coinage, which has not been done before. This study examines the qualities that typically differentiate regions with periodic re-coinage from those with other monetary systems and analyzes how periodic re-coinage was monitored and enforced. It also discusses the economic consequences of periodic re-coinage. The analysis shows that periodic re-coinage works particularly well in small currency areas and in economies that had a small volume of coins in circulation. The latter fact facilitates both re-minting and monitoring of re-coinage. Hoard evidence shows that re-coinage was less efficient, the higher was the tax rate. Secret debasement was the alternative method for collecting a monetary tax. It was less restrictive and had lower administrative costs for the coin issuer than periodic re-coinage. Besides low monetization, the strong position of ecclesiastical coin issuers, who disliked manipulations of weights and fineness, was likely a factor in why periodic re-coinage was preferred to debasement in some parts of Europe.

404. TAASOB, Razieh, University of Vienna, Austria

An analytical study of the Heraios coinage

The question of the attribution and chronology of Heraios coinage has been widely debated in numismatic studies of Central Asia, with the contributions of Macdowall and Wilson 1970, Davidovich 1980, Zeymal 1983, Cribb 1993, and Alram 1999 discussing the geographical and historical background of the coinage. However, these works do not provide a sufficiently comprehensive corpus for establishing the issuing sequence of silver coins in the early Kushan period. This paper examines the minting process of Heraios coinage and addresses the different phases of production involved in the minting system, which have not previously been undertaken. My main approach is the analysis of 89 tetradrachms and 85 obols. As a result of the study of tetradrachms, it is possible to distinguish seven groups and their subdivisions. Mostly these groups represent different chronological stages. This research proposes that there may be more than one work units involved for Heraios tetradrachms. I also attempt to suggest the internal chronology and metrology for Heraios's coinage. My paper concludes that Heraios was one of the local rulers of Bactria in the early Kushan period who continued to follow Greco-Bactrian and Indo-Iranian traditions.

405. TALIERCIO MENSITIERI, Marina, Università "Federico II", Napoli, Italy

Divisionali di argento in Magna Grecia tra VI e V secolo a.C.

In Magna Grecia l'uso di divisionali di argento è fenomeno precoce, ma differenziato nelle singole zecche e nei vari periodi, riflettendo esigenze monetarie diversificate. Tale problematica viene affrontata per le monete del versante ionico, al fine di una puntualizzazione cronologica e funzionale.

406. TALIERCIO MENSITIERI, Marina, Università "Federico II", Napoli, Italy

Cumae (Napoli): contesti numismatici da età greca ad età bizantina (poster)

Studio delle evidenze monetali da contesti archeologici dell'area urbana e suburbana della antica Cuma (Napoli): si presentano i primi risultati della ricerca numismatica in corso, basata su dati inediti, e finalizzata alla comprensione dei fenomeni di produzione e circolazione della valuta antica, su scala regionale, da età greca ad età bizantina.

407. TANDON, Pankaj, Boston University, United States of America

The Identity of Prakāśāditya

One of the enduring open questions in ancient Indian history is the identity of the king who identifies himself on the reverse of his gold coins as Prakāśāditya. Ever since the discovery of his coins in a hoard of Gupta coins in 1851, Prakāśāditya has been assumed to be a Gupta king by almost all scholars and other observers. Then, in 1990, Robert Göbl suggested that Prakāśāditya was not a Gupta at all, but a Hun. However, except for a small group of scholars in Vienna, who might be

thought of as Göbl's intellectual heirs, most authors have continued to treat Prakāśāditya as a Gupta king. In this paper, I will review the various proposals on the identity of Prakāśāditya, arguing that we can be quite sure, as Göbl had suggested, that he was in fact a Hun king. Then, by presenting a near-complete reading of the obverse legend for the first time, I show that he was in fact Toramāṇa, as Göbl had speculated. Implications of this finding are then considered.

408. TANDON, Pankaj, Boston University, United States of America

The Coins of the Pāratarājas (poster)

The Pāratarājas were the rulers of a kingdom in what is now the Pakistani state of Baluchistan during the second and third centuries. Very little is known about them other than a few stray references in the literature. Their coins were first identified by B.N. Mukherjee in 1972, and further studied by R.C. Senior, but few specimens were known and there were many gaps in our understanding of the coinage and the history of the kingdom. This paper will present a thorough survey of the coinage, identifying the coins of 11 kings, arranging them chronologically, and dating them. Several misconceptions that had grown up in the literature will be dispelled. The implications for our knowledge of two powerful neighbors, the Kushans and the Sasanians, will be discussed.

409. TAWFIQ, Ibrahim, Spain

The use of the generic "Abd Allah" on the coinage of Al-Andalus and Al-Maghrib al Aqsa during 11th-13th centuries

After the sudden collapse of the Umayyad caliphate in al-Andalus in 399H/1008 the use of a generic "Abd Allah" begins to appear on a series of coins struck in al-Andalus and Maghrib al-Aqsa. Its appearance on the currency of various political powers on either side of Straits of Gibraltar has led to an interesting debate and brought out questions as to identity implied by such a generic appellation and to its possible ideological projection. This paper will deal with the term as it appears chronologically on the coins of the various dynastic powers and will try, using the coins and the various sources, to argue a reasonable explanation.

410. TEK, Ahmet Tolga, Anadolu University, Turkey

Recent Coin finds from Side in Pamphylia

Recent excavations in Side have provided several new coin finds including a Roman Imperial hoard of *denarii* and *cistophorii* in a terracotta money box. With the addition of new coin finds to those published by Prof. S. Atlan in 1976 (1947-1967 seasons), new insight could be made into the circulation of bronze coins in this town in Greek, Roman and Medieval times. The aim of this paper is to present the new coin finds and evaluate the coin circulation in Side.

411. TEKIN, Oğuz, Istanbul University, Turkey

Pegasus or Hippalectryon: Identification of a creature on the coins of Mysia and Troas

Some cities in Mysia and Troas (i.e. Lampsacus, Adramytteum, Cyzicus, Scepsis, Iolla) put on their coins a creature as a main type which was identified as Pegasus in the previous studies. But the back of its body terminates differently, not terminated in a usual manner as it appears on the depictions of the Pegasi. The paper deals with the identification of this creature and try to seek an answer to the problem (if there is).

412. THOMPSON, Robert, Royal Numismatic Society, London, United Kingdom

Petty's Quantulumcunque concerning Money

Sir William Petty FRS wrote "A Quantulumcunque concerning Money" in 1682, but it was not published until after his death. It states the reasons which make the precious metals fit to be standards of value, set out in question-&-answer form. Question 20 introduces the subject of money made wholly of base metal, and Question 21 asks: "Which is best, Copper or Tin, for this purpose?" Answer: "Copper: Because it is capable of the most imitable and durable Coinage...". This does not make sense, but the recent transfer of the original manuscript to the British Library permits a correction. Further details of Petty may be given.

413. TODESCA, James, Armstrong State University, United States of America

Selling Castile: The gold morabetino alfonsin in Mediterranean trade, c. 1172-1252

Around 1100, the Almoravid kingdom in Muslim Spain and North Africa had access to the Ghana gold trade and produced quality dinars of approximately 4 grams. Called the *morabetino* by Latin merchants, these dinars were sought after in trade as far east as Alexandria and Syria. By 1157, however, a new North Africa sect, the Almohads, began to supplant the Almoravids. Their dinars weighed only around 2.3 grams, a radically new standard in the Islamic world. Meanwhile, a renegade Muslim lord in Spain, Ibn Mardanish, continued to strike the *morabetino* using it to procure military aid from the Christian princes of northern Iberia. When Ibn Mardanish died in 1172, Alfonso VIII of Castile began minting an imitation of the *morabetino*. The kings of Leon and Portugal soon followed his example. But only the Castilian coin was successful. It continued to be minted until 1250 and, unlike its Leonese and Portuguese counterparts, is found in hoards and cited in documents outside Iberia. Why the Christians imitated the *morabetino* rather than make do with the Almohad dinar, and why the Castilian variety was more successful than the others are questions that have never been addressed. This paper proposes that Castilian trade relations with Genoa allowed the *morabetino* alfonsin to fill a specific niche in Mediterranean commerce. Before the introduction of the florin and genovino in 1252, the *morabetino* alfonsin was carried by Italian merchants to the busy ports of the Levant.

414. TONISCH, Mareike, University of Vienna, Austria

Lite, es dupundi. Lite, immo es aeris assis - Prices, wages and values in the Roman Empire

A common question numismatists often have to face is, what a typical Roman in antiquity could buy with a *sestertius* or a *denarius*. While the prices and values mentioned in the literary sources (Szaivert/Wolters: “*Löhne, Preise, Werte. Quellen zur römischen Geldwirtschaft*”) and the papyri (Drexhage: “*Preise, Mieten/Pachten, Kosten und Löhne im Römischen Ägypten*”) are already collected and in part analysed, the epigraphical sources still have to be processed. The current project “*Löhne, Preise und Werte im Römischen Reich: Erschließung der epigraphischen Überlieferung und Gesamtauswertung*” (“*Wages, Prices and Values in the Roman Empire: Compilation of the epigraphical Evidence and overall Analysis*”) aims to an applicable extent at the compilation of the latin inscriptions containing prices and values until the age of Diocletian (about 2500 were found). By compiling these inscriptions a research gap is closed and an overall analysis of these three sources is made possible. Besides the compilation the inscriptions are analysed along with the papyri and the literary sources. There are four research areas defined for the analysis: documentation and representation/mentality (i.a.: what prices and values are mentioned in inscriptions, papyri and literary sources? Are there differences regarding time, region and social group?), monetization (i.a.: is it possible to make a statement about the level of monetization of the Roman Empire?), trends in prices and coin values (i.a.: is it possible to detect long-term price trends? Which coin values are named? Do the mentioned coin values mirror the coin finds in specific regions?), and rhetoric.

415. TORREGROSA YAGO, Jose Manuel, Universidad de Valencia, Spain

The silver coinage of Iltirta. Drachmae and fractions in the late Third Century BC (poster)

In this study we provide a reasoned sequence of the silver coinage with the legend Iltirta which was issued during the late period of the Second Punic War. Iberian imitations of Emporion silver drachmae and fractions which copied the small silver coins issued by the city of Massalia conformed the money that was used to cover the expenses of the War. Presumably, these emissions were minted to support the Roman army. Although some of these coins do not have legends, their attribution to the Iberian mint of Iltirta is certain given that a good number are inscribed with the city name and show a wolf, which was its totemic animal and badge during three centuries. In addition to the sequence of these series, the function and use of these silver coins, until they were withdrawn from circulation in the years immediately after the War, in Cato's days will also be discussed. Finally, we will analyse its peculiar iconography compared to other contemporary silver coinages.

416. TOTEV, Boyan, Regional Historical Museum, Dobrich, Bulgaria - **DOBREV, Dobri**, Regional Historical Museum, Dobrich, Bulgaria - **LAVYSH, Krystsina**, National Academy of Sciences of Belarus, Minsk, Belarus

The Hoards of Early Byzantine Coins from the Monastery in Slavnata Kanara

An early Christian monastery near the locality of Slavnata Kanara is situated on the territory of Dobruja (North-Eastern Bulgaria), on the upland embosomed with a narrow river valley, in the dense forest near the ancient Pontic towns of Odesos

and Dionisopolis. Here, on the territory of old Roman province of Scythia Minor, there were some of the earliest centres of monastic movement. The monastery occupies an area of 2,300 m². One third of this area is occupied by a basilica and neighboring structures. It arose during the Late Roman Empire and was destroyed during the Avars-Byzantine wars at the end of the 6th century. The traces of these dramatic events were discovered during the archaeological excavations in August – November 2014. Two hoards were found in the structure adjoining the basilica on the northern side. One of them consists of 1240 *pentanummium* and *decanummium* coins of the 6th century minted in different centres of the Byzantine Empire and put into the amphora. We can suppose it was a hidden alms. The second one, unfortunately partly pillaged by treasure-hunters, includes different denominations of Byzantine bronze coins and a glass exagium with the image of the saint, an inscription and a monogram. These finds are under research now. We would like to present the final results at the Numismatic Congress.

417. TRAEGER, Burkhard, Bremer Numismatische Gesellschaft, Germany

Die Münzprägung und Geschichte von Phliasia (Peloponnesus) bis zum Ende der hellenistischen Zeitepoche

Phliasia mit seiner Hauptstadt Phlious war im Altertum einer der kleinsten Staaten der Peloponnes. Zwischen Achaia und Korinthia nahe Nemea in einem Weinanbaugebiet gelegen, war Phliasia von herausragender strategischer Bedeutung. Mehrfach in seiner Geschichte diente Phliasia, das an den Perserkriegen, dem Peloponnesischen Krieg oder dem Kampf gegen Epameinondas teilnahm, als Sammelplatz der Truppen der befreundeten Lakedaimonier. Als Mitglied der Peloponnesischen Liga vom 6. bis 4. Jahrhundert v. Chr. und seit 228 v. Chr. dem Achaischen Bund angeschlossen, blieb Phliasia während der klassischen und hellenistischen Zeitepoche unabhängiger Stadtstaat, der zahlreiche Eroberungsversuche des mächtigen Nachbarn Argós erfolgreich abwehren konnte. Die Münzgeschichte von Phlious beginnt früh; neben Kleonai zählte Phlious gegen Ende des 6. Jahrhunderts v. Chr. zu den ersten Münzstätten auf der Peloponnes. Die Münzprägertätigkeit von Phlious wird als nicht bemerkenswert beschrieben; zu unrecht. Aufgrund des Fehlens systematischer Ausgrabungen auf dem Gebiet von Phliasia sowie nur wenigen Schatzfunden mit einer größeren Anzahl von Münzen aus Phlious war die Zahl der bekannten Münztypen dieser *Polis* bis vor kurzem begrenzt. Nicht zuletzt aufgrund der in der Sammlung BCD zusammengetragenen aus zahlreichen Streufunden der nördlichen Peloponnes stammenden Münzen von Phlious hat sich diese Zahl mehr als verdoppelt. Heute kann die Münzgeschichte von Phlious neu geschrieben werden mit präziseren Datierungen der Prägungen, Deutungen der Münzbilder oder dem Nachweis des zeitlichen Beginns der Prägung von Bronzemünzen auf der Peloponnes Ende des 5. vorchristlichen Jahrhunderts.

418. TRAVAGLINI, Adriana, Università del Salento, Lecce, Italy

Monete e riti a Hierapolis di Frigia

La documentazione numismatica proveniente da Hierapolis di Frigia (Turchia) si lega in modo significativo a formule rituali, a carattere pubblico o privato; tale dato emerge sia dalle forti concentrazioni, variamente connotate, di reperti in aree urbane a vocazione sacra e culturale (necropoli, santuari, chiese, etc...) sia da peculiarità deposizionali riscontrate anche all'interno di contesti abitativi. Il materiale, analizzato in stretta relazione con il proprio contesto di rinvenimento, offre, dunque, anche attraverso confronti mirati con situazioni analoghe riscontrabili in altre realtà, spunti di riflessione su diversi aspetti del rapporto tra moneta e rito, lasciando emergere il "volto sacro della città sacra" in forme ed epoche diverse.

419. TRAVAGLINI, Adriana, Università del Salento, Lecce, Italy – **CASSANO, Maria Raffaella**, Università di Bari "Aldo Moro", Italy – **CAMILLERI, Valeria Giulia**, Università del Salento, Lecce, Italy - **DE PINTO, Nicola**, Università di Bari "Aldo Moro", Italy – **FANIZZA, Monica**, Università di Bari "Aldo Moro", Italy – **FIORIELLO, Custode Silvio**, Università di Bari "Aldo Moro", Italy

Archeologia e monete ad Egnazia (Brindisi): l'area della Basilica Episcopale (poster)

La porzione di abitato su cui sorgono i resti della Basilica Episcopale ha rivelato, nel corso delle indagini archeologiche effettuate a partire dagli anni '70 del secolo scorso, una complessa sequenza stratigrafica che dall'età messapica giunge fino alla costruzione e, in seguito, all'articolata ristrutturazione dell'edificio ecclesiale. L'area, in origine destinata a funzione eminentemente funeraria (IV-III sec. a.C.), documenta il succedersi di impianti artigianali e residenziali (*fullonica*, *domus*, manifattura ceramica) fino al I sec. a.C., esigue tracce archeologiche di età imperiale soggette ad una traumatica distruzione nella seconda metà del IV sec. d.C., quindi il primo impianto della Basilica (fine IV-inizi V sec. d.C.) e, infine, intorno alla seconda metà del V sec. d.C., una sua seconda fase costruttiva. I reperti monetali rinvenuti, sia isolatamente che in nucleo, seguono l'intero percorso d'uso dell'area, fornendone preziose indicazioni di carattere cronologico, e informano, nel contempo, su aspetti salienti della storia della città.

420. TRAVAINI, Lucia, Università di Milano, Italy

Mints as Volcanoes: Fire and Technology (Lectio inauguralis)

From antiquity to Rubens: iconography, technology, terminology of the mint. Connections with the mythology of Vulcan.

421. TRIFIRÒ, Maria Daniela, Università di Messina, Italy

I gesti della divinità: il multiforme Apollo

Sulla monetazione di epoca greca (VI-I sec. a.C.), coniata dalle città, dalle colonie, sorte lungo le coste del Mediterraneo e del Mar Nero, e dai sovrani ellenistici, la figura intera del dio Apollo è rappresentata spesso secondo schemi iconici diversi – gradiente, inginocchiato, stante, seduto e appoggiato –, nudo o abbigliato, e con molteplici attributi legati alla sfera semantica apollinea. Dall’analisi diacronica e diatopica dei documenti numismatici si è potuto evincere che gli oggetti assumono un diverso significato se il dio li tiene nella mano destra o in quella sinistra, permettendoci di individuare di volta in volta l’epiclesi o funzione del dio e l’azione che egli compie. Infatti la mano destra si è rivelata essere quella che compie l’azione, quindi, per es. quando il dio ha una *phiale* nella destra, soprattutto in prossimità di un altare o di un tripode, sta compiendo una libagione, secondo un’epiclesi che, invece, ci è svelata dall’attributo che Apollo tiene nell’altra mano, quella sinistra: *daphnephoros*, arciere, citaredo... Il confronto con altre classi di materiali ha consentito, inoltre, di confermare l’ipotesi di lavoro e di riconoscere un linguaggio comune che la moneta veicola più chiaramente di altri documenti archeologici in quanto espressione ufficiale dello Stato e dell’autorità emittente, che seleziona accuratamente gli elementi da imprimere sui piccoli tondelli di metallo in base al messaggio che vuol far giungere a chi utilizza la moneta, siano essi cittadini o sudditi.

422. TROMMENSCHLAGER, Ludovic, France

Un atelier de faux monnayage magnencien dans les Vosges (France): des nummi lourds surfrappés à l'effigie de Magnence

Découvert dans les Vosges, un lot composé de fausses monnaies, de flans vierges et de boudins s'est révélé être constitué principalement de *nummi* lourds. Cependant, sur cet ensemble, deux *nummi* lourds ont été clairement surfrappés par des coins de Magnence. De plus, provenant du même lot, une *maiorina* de Magnence au chrisme semble être également du même type que les surfrappes. Des analyses et des fouilles archéologiques complémentaires seront effectués durant l'année 2014 et permettront une meilleure vision de cet ensemble atypique. Il conviendra alors de déterminer par des études de coins, archéométriques et physico-chimiques si les *nummi* lourds et les flans vierges proviennent d'un même atelier de faussaire et si cet ensemble a été constitué pour frapper des *maiorinae* à l'effigie de Magnence.

423. TSAGKALIA, Christina, Aristotle University of Thessaloniki, Greece

The iconographical type of Dionysus Lyceus/Aesymnetes on the provincial coinage of Patrae: An interpretative approach

On the bronze coins (*assaria*) struck by the colonial mint of Patrae, is depicted a unique, according to peloponnesian coinage, type of Dionysus Lyceus supported by a Satyr and accompanied by panther and Maenad. This paper aims to correlate the Dionysus Lyceus coin type to Dionysus Aesymnetes and to connect them with a statuary type. This connection is based on the interpretation of the ancient sources and the comparison with Roman copies, giving a *terminus post quem* for the dating of the potential sculptural type. The cult of Aesymnetes was related to the enforcement of order and also to the settlement of the villages that led to the establishment of Patrae. Therefore the choice of this particular type on the *assaria* struck by Septimius Severus probably refers to the new settlement that was created during the reign of Augustus and led to the establishment of the Roman colony of Patrae. In this context, the local aristocracy chooses a local coin type, which during the imperial times acquires a new semantic meaning. It shows the commitment of the local ruling class to Rome as a factor of enforcing law and order, but at the same time it demonstrates the dual identity of this ruling class who expresses its dedication and admiration towards Greek history and tradition, while also being faithful to Rome.

424. TSOUKANELIS, Kimon, Greece

A new bronze coin of Alexander Molossos, son of Neoptolemos (poster)

Alexander Molossos, son of Neoptolemos, issued gold, silver and bronze coins to pay his troops during his campaign in Italy (334-331 BC). Recently a new bronze coin of Alexander appeared. This issue is unrecorded. It is probably a coin issue minted as a smaller denomination in relation to the already known bronze emission. The coin in question was possibly minted in Croton during the last days of Alexander's expedition.

425. TURRICCHIA, Arnaldo, Accademia Italiana di Studi Numismatici, Bari, Italy

Five Centuries of Italian Medals: a Preliminary Statistical Overview

From the XV century to the end of the XIX century more than 22000 medals have been cast or struck in Italy. Thanks to a medal database built by the author on the basis of published books, articles, auctions catalogues, private and public collections, it is possible to do a statistical evaluation of several aspects, such as the following (and many others): - number of medals cast or struck in each century; - production of the various medal engravers; - number of medals regarding the different Italian states; - persons most frequently engraved on medals. This overview is "preliminary" and subject to various uncertainties: - the dating of the medals and is not always possible, so educated guesses are to be made; - the authors are not always known with certainty since many medals are not signed and the experts do not always agree on their attribution; - the medals of the XV and XVI centuries have been thoroughly studied and few new medals are expected to appear in the future but improvements in medal dating and attributions might be made; - for the XVII-XIX centuries, a certain number of medals unknown until now are expected to come up (e. g. devotional medals whose study is just now under way) but my personal estimate is that, at most, a 5%-10% increase would take place. In any case the statistics shall have to be periodically updated.

426. UJES MORGAN, Dubravka, University of Delaware, United States of America

Greek Coin Finds from Rhizon in Sir Arthur Evans Collection, Ashmolean Museum

The paper presents an overview of the Classical and Hellenistic coins from the site of ancient Rhizon, which are kept in the Coin Collection of Sir Arthur Evans in the Ashmolean Museum, Oxford. These coins were collected by Evans at the site of the ancient town of Rhizon, modern Risan in Montenegro, during his travels through the Western Balkans in the 1870s and 1880s. Evans personally discovered most of these coins through his excavations and prospection of the terrain on the site of the lower town of Rhizon, and also acquired some from the local inhabitants. These coins were issued by a variety of authorities, such as Corinth, her colonies, the Paeonian kings, Damastion, "Illyro-Paeonians", various cities on the eastern and western coasts of the Adriatic and Ionian Seas such as Apollonia, Dyrrhachion and Pharos, and by Rhizon and King Ballaios. The chronology of issuing ranges from the end of the 5th to the 1st century B.C. The greatest concentration is in the later 3rd and early 2nd century B.C., when Rhizon, then a city of considerable importance, was mentioned by Polybius (2.11.16) and Livy (45.26. 2, 13 and 15) in connection with the wars between the Illyrians and the Romans. Except for a few specimens, these coins remained unpublished. Thus this paper will add new information for the study of the contacts and exchanges in the Adriatic and Ionian Seas regions in the Classical and Hellenistic periods.

427. ULONSKA, Hans-Jürgen, Erfurter Münzfreunde e.V., Germany

Neues zu den schwedischen Interimsprägungen in Deutschland 1631 bis 1649

Im Verlauf des 30jährigen Krieges (1618 bis 1648) ließen die Schweden in zahlreichen deutschen Münzstätten (bspw. Augsburg, Erfurt, Fürth, Mainz, Nürnberg, Osnabrück, Weimar) vor allem Taler und Dukaten prägen. Neue Erkenntnisse zur Prägestätte Straßburg sowie einer weiteren Münzstätte werden im Kontext sämtlicher schwedischer Interimsprägungen (1631 bis 1650) in Deutschland vorgestellt.

428. ÜNAL, Ceren, Celal Bayar University, Turkey

Kavakli hoard from Aydin Museum/Turkey - A Group of Gold Coins from the Reign of Constans II

When Heraclius died in 641 AD, a conflict started for gaining the throne between his two sons. His two oldest sons Heraclius Constantine (Constantine III) and Heraclonas who were brothers-in-law, were crowned as emperors. Constantine III died three months after his coronation. The public and the Senate rejected Heraclonas' and his mother Martina's domination and insisted on crowning the son of Constantine III called Constans as a sole emperor. Although his baptismal name was Heraclius, he was officially given the name of Constantine but this was popularly abbreviated to Constans. Constans II depicted with his son, co-emperor Constantine IV, on his issues and his other sons whose name were Tiberios and Heraclius also depicted on the reverse side of gold coins. A group of gold coins were found in Kavaklı in 1978 and then they were brought to Aydın Museum. The treasure of Kavaklı has a group of *solidi* from the reign of Constans II. There are five different types: Class III (651-654), Class IV (654-659), Class V (659-661), Class VI (661-663), Class VII (663-668). The treasure of Kavaklı will be presented according to its classifications with the help of the historical events of the era.

429. ÜNAL, Ceren, Celal Bayar University, Turkey - **ERSOY, Akın,** Dokuz Eylül University, Turkey

A lead seal of Alexius I Comnenus from Agora Sector, excavations of Smyrna

A lead seal of Alexius I Comnenus were found during the excavations of the Smyrna, *Agora* Sector in 2008. On the obverse of the seal is represented the enthroned Christ and on the reverse the full-length figure of emperor. These representations are common for the Constantinopolitan electrum trachea which were dated to emperor's early years – the transitional coinages type dated by M. F. Hendy, between 1081 and 1082. The depictions on this transitional coinages type of electrum trachea and a lead seal of Alexius I Comnenus from *Agora* Sector have a great resemblance. Later issues of electrum trachea bear new representations and new inscriptions, however the style of seals remained unchanged. A lead seal of Alexius I Comnenus is an important find for *Agora* Sector/Smyrna Excavation as testimony of correspondence of the imperial court with Smyrna and its iconographical parallelism with coins. The lead seal from *Agora* Sector present close relationship between iconography of seals and coins of Byzantine Empire.

430. UPCHURCH, Brent, United States of America

Constantinian AVGGG coinage from Rome and Ostia, 312-313

Between the Battle of the Milvian Bridge in October 312 and the death of Maximinus II in April 313, three emperors ruled the Roman Empire - Constantine I, Licinius I and Maximinus II. Constantine and Licinius shared a strong alliance, but relations with Maximinus were strained. War soon erupted between Licinius and Maximinus, but Constantine remained aloof from the conflict and made at least a pretense of traditional, Tetrarchic concordia by issuing coinage for his imperial colleagues at all of his Italian mints just acquired from Maxentius. *Concordia* was demonstrated also by bronze coins bearing the reverse legend abbreviations, AVGGG for *Augustorum*, and AVGGG NNN for *Augustorum nostrorum*, struck only at Rome and Ostia. Although previously known only for Constantine, unpublished AVGGG coins struck for Licinius and Maximinus will be presented. From the Rome mint, Sutherland described a VICTORIA AVGGG with Victory advancing. An unpublished coin with the same legend, but different type showing Victory crowning the emperor will be presented, along with an unpublished group of five die-matched coins bearing the legend VIRTVS AVGGG. These latter coins, struck for Constantine and Maximinus, show the emperor, nimbate, on horseback, spearing captives. From the Ostia mint, Sutherland described a single issue for Constantine, VICTORIA AET AVGGG NNN, with Victory inscribing a shield on a palm tree. An issue for Licinius is now known. Another unpublished type, Victory presenting globe to the emperor, will be presented for Constantine and Maximinus. The historical context and the unusual legends and iconography will be discussed.

431. VALCI, Mariele, Musei Capitolini, Roma, Italy

Un ripostiglio di denari anconetani e ravennati proveniente dai Fori Imperiali (Roma) e conservato nei Musei Capitolini (Roma)

Tra i secoli XIII e XIV, il denaro di Ancona circola diffusamente in tutta l'Italia centrale ed è presente anche in altre zone della penisola, oltre che in alcuni territori ad essa limitrofi. Tuttavia, per quanto essa risulti una delle principali emissioni dell'Italia centrale basso-medievale, diverse problematiche impediscono ancora una chiara comprensione delle dinamiche di sviluppo di questa moneta. Incerto è infatti il momento della sua introduzione: la prima attestazione nota è presente in un contratto del 1170; ma si tratta di una testimonianza isolata, seguita solo un trentennio più tardi da nuove, più numerose attestazioni. Inoltre, la carenza di materiale archeologico disponibile non ha consentito un facile progresso delle ricerche, tanto che ancora oggi il principale punto di riferimento resta il pionieristico studio di D. M. Metcalf (METCALF 1974), il primo ed unico tentativo di elaborazione di una tipologia per questa emissione. Lo studio di un ripostiglio inedito di 32 anconetani e 2 ravennati, rinvenuto

nel Foro di Nerva a Roma e conservato nei Musei Capitolini, fornirà nuovi dati che, integrati con quelli già noti, permetteranno di proseguire gli studi tipologici avviati dal Metcalf e progredire verso una migliore conoscenza di quest'emissione.

432. VAN DER KAM, Erik, National Numismatic Collection, Central Bank of the Netherlands

1914: Private notes in the Netherlands

Something we know now but was quite uncertain in the first days of World War I, was that the Netherlands were not involved in a military way. Despite of this, the Dutch government acted as if war was coming, as did the rest of the nation. People kept their silver and gold coins to themselves and tried to pay everything with paper money. This resulted in a shortage of coins, which the government tried to resolve by bringing new silver coins into circulation. These silver coins disappeared as soon as they had appeared, so the government decided to create paper coins with a value of 1, 2.5 and 5 guilder. Two problems arose. First, it took some time to create this paper coins. The second problem was that most of the trucks and trains that were needed to transport the coins were confiscated by the Ministry of War. As a result of these problems, no one knew whether the government would be able to get all of the new notes into place before the first weekly payday. Mayors and presidents of factories decided to take matters into their own hands and started to create their own money. In this presentation, I will discuss how the central government reacted on this unofficial money and how the nation responded to this.

433. VAN HEESCH, Johan, Royal Library of Belgium

The end of the Monetary Economy in Northern Gaul: the examples of Tongeren & Tournai

Recent excavations in Tongeren and Tournai (both in modern Belgium) have yielded large lots of Roman coins in late Roman and early medieval contexts. These finds allow us to study in more detail the transition between antiquity and the early middle ages. The following topics will be presented: a summary of the finds, coins in contexts: methodology, coin use in the fifth century AD. The main propositions are: most of the coin finds from excavations are of very little to no value for the study of coin circulation, the use of small change disappeared in Northern Gaul in the first decades of the 5th century AD.

434. VAN SCHAİK, Katherine, Harvard University, United States of America

The Currency of Medicine: healing imagery on the coins of Kos, Epidauros, and Pergamon, from the 4th century BCE to the 4th century CE

This paper presents a preliminary study on the iconography of Asklepios and healing on the coins of the three major centers of Epidauros, Kos, and Pergamon from the 4th century BCE to the 4th century CE. It is based on the examination of the holdings of the American Numismatic Society, the Harvard Art Museums, the British Museum, and the major published collections. While these coinages may show a variety of divinities, depictions of Asklepios – or of the symbols associated with him, such as the snake – persist throughout the centuries under consideration. The forms of these depictions remain constant and similar in all three cities and provide evidence for the practice of medicine and healing, and common perceptions of medicine and healing, in all three sanctuaries. Moreover, the images provide evidence of the Mediterranean-wide growth in the popularity of healing cult that began in the second century CE and continued into the Christian era. It will be argued that development and growth of the healing temples in these cities is paralleled in the healing iconography on the cities' coinages: the coins of Epidauros, Kos, and Pergamon consistently and clearly testify that their issuing cities were places of healing, and their imagery invites the viewer to look at medicine as a cultural export. The 'currency of medicine' encourages us to consider the modern relevance of advertising centers of healing and the way in which certain contemporary cities also choose to identify themselves publicly with the art of healing.

435. VANHOUDT, Hugo, Koninklijk Belgisch Genootschap voor Munt- en Penningkunde, Belgium

The coinage of Philip V of Spain in the Low Countries (1702-1710)

This paper completes the types of coins and improves the chronological overview of the coinage of Philip V in the Low Countries. The death of Charles II of Spain in November 1700 led to the War of Spanish Succession during 12 years. Philip V, supported by France and Bavaria, claimed the heir of the worldwide Spanish kingdom. Being afraid to lose the political balance of power in Europe, Philip V was not recognized by the European Grand Alliance mainly composed of Great Britain,

the Dutch Republic, the Holy Roman Empire and Portugal while they preferred Charles III. During this war Philip V had to withdraw from several northern provinces in the Southern Netherlands and resulting in a chronological history of coinage through these provinces in the period from 1700-1712. The Peace of Utrecht (1713) and other treaties confirmed Philip V as successor of the Spanish kingdom without the Low Countries which went to Charles III who was the Holy Roman Emperor since 1711 as Charles VI. In 1850 the coinage of Philip V in the Low Countries for Namur was catalogued and described in Renier Chalon, *Recherches sur les Monnaies des Comtes de Namur*, Bruxelles 1860 with a supplement in 1870, followed by other authors since then. Recent research led to substantial corrections by eliminating two (non-existing) types of coins (Ch suppl. pl. 2, XXVII and Ch 274 var.) while clearly separating other types of coins and their variations. For all three mints Antwerp, Bruges and Namur the types and periods of minting are defined.

436. VICARI SOTTOSANTI, Maria Agata, Università di Catania, Italy

Testimonianze della circolazione degli antoniniani in Italia meridionale e insulare (poster)

Si presentano in questa sede i risultati di uno studio sulla circolazione degli antoniniani, prodotti fino alla riforma di Diocleziano (294 d.C.) da zecche sia dell'impero centrale sia dell'"*Imperium Galliarum*", nei territori dell'Italia meridionale e insulare. Il censimento degli esemplari comunque ritrovati, in complessi associati, sporadici, in strato, editi e anche inediti, ha permesso di mettere in evidenza alcuni aspetti della storia economica delle suddette aree, le cui vicende storiche in generale sono taciute dalle fonti letterarie.

437. VILCU, Aurel, Institute d'Archéologie "Vasile Pârvan" de l'Académie Roumaine, Romania

Sur les statères en or de type Alexandre le Grand frappés à Callatis

Jusqu'à présent on a supposé que la cité de Callatis (située sur la côte occidentale de la Mer Noire) aurait frappé des statères en or de type Alexandre le Grand constamment ou sporadiquement dans l'intervalle env. 279/278-228/220 ou 250-225 av. J.-C. La révision du matériel numismatique et les résultats des analyses du métal révèlent des détails qui changent d'une manière significative la perception des émissions en or de type Alexandre le Grand frappées à Callatis. L'analyse stylistique du matériel numismatique disponible (142 exemplaires provenant de collections publiques, trésors ou de catalogues de vente aux enchères) s'avère importante pour la chronologie des émissions de statères, prouvant que plusieurs séries à monogrammes différents ont été frappées dans un court laps de temps. L'examen du matériel numismatique montre que plusieurs coins de revers ont en commun le stylis tenu par Niké, dont la partie supérieure est de forme triangulaire, représentant un pavillon schématisé. Ce type de stylis caractérise huit séries de statères qui constituent un groupe distinct dans le cadre des émissions callatiennes en or. Un document important pour la chronologie des statères callatiens en or est le trésor de 107 statères de Philippe III, Alexandre et Lysimaque inventé à Dăeni (Roumanie). Le dépôt a été examiné et on a établi, à l'aide de l'analyse stylistique et typologique, que les statères callatiens ont été frappés au milieu du III^e siècle av. J.-C. La chronologie des statères callatiens est suggérée par l'analyse des trésors découverts à Anadol (Ukraine) et Mărașești (Roumanie).

438. VILLELA-PETIT, Inès, Bibliothèque nationale de France, Paris, France

Illustres d'Italie: les médailles italiennes de Louis XIV d'après l'inventaire de 1685

A l'occasion de l'installation du Cabinet du Roi à Versailles en 1684, le marquis de Louvois fit dresser un premier «Catalogue des médailles modernes», instrument fonctionnel à l'usage du garde du Cabinet Pierre Rainssant (1683-1689) et de ses acolytes, bientôt suivi d'un second plus volumineux encore en 1689, pour tenir compte de l'accroissement rapide de la collection. Il existe cependant une série parallèle de registres à la belle reliure de maroquin rouge semée de fleurs de lys d'or assortie au cuir estampé des plateaux. Les destinataires n'étaient autres que le roi Louis XIV lui-même, ses hôtes et les savants reçus dans son Cabinet. La série comprend six volumes regroupant les médailles par provenance: France, Papauté, Italie, Allemagne, Hollande, et un dernier pour Angleterre, Suède, Danemark et Pologne. Nous nous intéresserons plus particulièrement au «Catalogue des médailles des cardinaux, des princes, et des illustres d'Italie» et à ce qu'il nous apprend de l'état de la collection italienne vers 1685. Il faut imaginer que la consultation des registres accompagnait celle des plateaux de médailles correspondantes. Chaque notice est en effet assortie d'une explication iconographique, historique ou politique qui lui donne un caractère pédagogique et éclaire la façon dont l'histoire de la péninsule était perçue, orientée et comprise à la cour de France au temps de Louis XIV.

439. VITALE, Rosa, Seconda Università di Napoli, Italy

Some unpublished numismatic evidence from the northern Campania

This paper focuses on some unpublished numismatic evidence regarding the northern Campania where, during the last decade, the Archaeological Superintendence have gathered some numismatic evidence by means new excavations or collecting it from local private collections. To be concerned with it is the area where lay main centres of Campanian and Samnites people, such as Cales or Allifae. The research analyses different kind of coin finds (spot ones, stratified ones, hoards) regarding different chronological phases or historical periods.

440. VOGT, Simone, Museum August Kestner, Germany

To whom belong the coins? Jewish coin collections, the Third Reich and museums of today

Since 1938 the Nazis confiscated property and fortune of their fellow Jewish citizens. It is known that among the confiscated goods there were huge quantities of paintings and other artefacts like historic coins. 1998 Germany agreed to the Washington principles, which demand the investigation of the museums' and other holdings in order to find objects that belonged to persecuted Jewish owners. These objects are to be returned to the heirs of the former proprietors. Public attention focuses on famous paintings. But it is obvious that all kinds of artefacts in museums are concerned, including coin collections. Recently a collection of gold coins of exceptionally high quality once owned by a Jewish citizen has been reconstructed in the Museum August Kestner (Hanover/Germany). Research made sure that it was confiscated under Nazi law. The collector Albert David was forced to hand over the coins to the authorities of the Third Reich. Later he committed suicide and his coins were yielded to the Museum August Kestner. In 2013 the Museum and the city of Hanover reported the collection to the Lost Art register in Magdeburg. In the case of the existence of certified heirs, the collection can be given back to them. This would be the very first issue of this kind concerning coin collections and it will surely not be the last: it is only the beginning of extensive consequences following the Washington principles. It is likely that public coin collections will have to face changes of ownership in large amount.

441. VOLKOVA, Uliana, The Pushkin State Museum of Fine Arts, Moscow, Russian Federation

The collection of the Museum of Russian History in Berlin (1897–1914)

The Museum of Russian history was founded in 1897 in Berlin-Tegel by archpriest Alexey Maltsev (1854–1915). The Museum was affiliation of the Brotherhood of St. Vladimir in Berlin. Charity was the principal direction of Brotherhood's activity. Cathedral of Brotherhood as well as house named after Emperor Alexander III and Orthodox cemetery were being built in Berlin-Tegel during 1892–1893. Two rooms of the second floor of the house were intended for the library and museum. Paintings, prints, religious items, various documents, coins and medals were kept in the collection. The museum was considered to have been lost since the beginning of the World War I. However, it found out that during 1914–1956 the collection had been stored in the family of Oscar Kvaas in Berlin. His daughter Elizabeth donated the collection to the USSR. Since 1956 the collection has been stored in the Pushkin Museum of Fine Arts. Surviving part of the collection of the Museum consists of 1165 European and Russian coins and medals, religious items and enamel lockets and awards. The collection also confines ancient and oriental coins, North and South American coins. The basis of the collection was formed by Russian and German coins and medals of 18–19 centuries.

442. VON HEIJNE, Cecilia, The Royal Coin Cabinet, National Museum of Economy, Stockholm, Sweden

Spatial analysis as method for studying anonymous medieval coins – problems and possibilities

The paper discusses spatial analysis as a method. It is based on a study of anonymous medieval Swedish bracteates and two-sided coins from the fourteenth century. The material is rather roughly dated and it is unknown where most types were made. A couple of mints (Lödöse, Söderköping and possibly Uppsala) are known through pieces of lead with impressions of dies that have been found during archaeological surveys, but at large the mints are unidentified. The paper identifies opportunities and problems with spatial analysis. A comparison is made between the geographical distributions of types from identified mints with the distribution of types from unknown mints. The central question is: can spatial analyses be used as method for deciding unknown mints and what are the pitfalls?

443. VOREL, Petr, University of Pardubice, Czech Republic

The activities of the Roman Mint at the end of the pontificate of Urban VIII and rolling of the papal gold, silver and copper coins during the years 1634-1644

The period of the pontificate of Urban VIII (1623-1644) represents a ground-breaking turning point in the history of papal minting, mainly due to the introduction of machine-made coins at the newly established Papal Mint in Rome in 1634. This paper offers a new unusual perspective of the technical context of the history of Roman coinage during the years 1634-1643. The author of this paper encountered extensive sources of an accounting nature that explain the circumstances of the activities of the Roman Mint at that time. Based on an analysis of the preserved coinage material, the author attempts to accurately reconstruct the technological production processes that were slightly different from the then most common Tyrolean type, mainly in regard to the stamping cylinders. The author identified all the stamping cylinders that were used to produce the gold, silver and copper coins. The metallurgical analysis did not confirm the original assumption of the minting of the silver coins with a lower fineness by the minting consortium (Farzetti and Pavia) in 1643. All the coins showed about the same degree of purity corresponding to the relevant minting regulations. The profit that the minting consortium obtained from this production, according to the opinion of the author, was created by the purchasing power of the silver piastres being increased by 5%, based on an official decision and therefore it was advantageous to quickly monetise most of the purchased silver by machine production and to place it in circulation with a higher nominal value.

444. WAHL, Marc Philipp, University of Vienna, Austria

Bildkontakte revisited. About the adoption of coin-types in Sicily and Italy in the 5th Century

Diffusion and imitations of coin-types are common phenomena in numismatics. My project aims to make an approach based on the coinage of Sicily and southern Italy in the 5th century BCE. Greek coins were an important medium of presentation with their constant motifs of a city and served for the citizens' identification with the community. There are also cases in Greek numismatics in which *poleis* adopted the motifs of other cities, even hostile communities, and gave up their own. It raises the question of why the usual motifs were extinguished in various Greek cities and the indication of its origin was abandoned or at least mitigated by using foreign motifs. Especially around Sicily cases of image diffusions are plentiful. The paper aims to present the heterogeneity of the phenomenon, which calls eventually for a broad typology of the cases.

445. WALTON, Philippa, The Ashmolean Museum, University of Oxford, United Kingdom

The Coin Hoards of the Roman Empire Project

From Arras in northern France to Reka Devnia in Bulgaria, thousands of coin hoards have been found throughout the geographical area which once constituted the Roman Empire. The information provided by these hoards has the potential to transform our understanding of coin supply, circulation and use, as well as having implications for the study of the Roman Economy as a whole. However, at present there is no comprehensive summary of this data and without this, their potential cannot fully be realised. Generously funded by the Augustus Foundation and co-directed by Professor Chris Howgego (Ashmolean Museum) and Professor Andrew Wilson (OXREP), *The Coin Hoards of the Roman Empire Project* intends to fill a major lacuna in the digital coverage of hoards from antiquity. Its aim is to collect information about hoards of all coinages in use in the Roman Empire between 30 BC and AD 400. Imperial Coinage will form the main focus of the project, but Iron Age and Roman Provincial coinages issued within this period will also be included. This paper will chart the progress of the project thus far, discuss ways in which the data might be used to undertake systematic study of the nature and function of hoarding and explore how it might promote the integration of numismatic data into broader studies of the Roman Economy.

446. WANG, Helen, The British Museum, London, United Kingdom

New Work in East Asian Numismatics

The paper will introduce new and recent projects on East Asian money at the British Museum - including the results of scientific analysis of coins and paper money, money on the Silk Road, and new displays in the British Museum galleries.

447. WATSON, George, University of Cambridge, United Kingdom

The system of coin production in Roman Asia Minor: new light on an old problem

Some of the most intriguing and enigmatic aspects of provincial coinage are the obverse dies shared by two or more cities and the stylistic similarities between obverse portraits on unshared dies. Both point to a system of collaborative production. The extent of such collaborations in the regions of Pamphylia, Pisidia and Cilicia during the 3rd century AD and how those systems operated is the subject of this paper. Central to the discussion will be the new light that this study sheds on the debate between the centralised place of minting model and one that envisages a network of itinerant engravers.

448. WEISS, Christian, Swiss Inventory of Coin Finds / University of Bern, Switzerland

The Sicilian Coinage of Henry VI (1194-1197): mint attributions reconsidered

The Sicilian Coinage of the Hohenstaufen has been studied since the 17th century. Today, with the splendid Medieval European Coinage 14 at our hands, scholars are still struggling when it comes to mint attributions for Henry's Sicilian denari and taris: Palermo or Messina? Palermo and Messina? The coin finds from Monte Iato (PA) may shed light on this old problem: by starting from one coin type alone and examining the different subtypes and variants, we can catch a glimpse of the way coinage was organised in Sicily at the end of the 12th century.

449. WEISSER, Bernhard, Staatliche Museen zu Berlin, Germany

Die archaischen Münzen in Thrakien. Strukturen und Ikonographie

Seit 2013 werden in Berlin die thrakischen Münzen im Bestand des Münzkabinetts der Staatlichen Museen zu Berlin und die Gipsabgüsse in der Berlin Brandenburgischen Akademie dokumentiert. Sie werden in dem thrakischen Themenportal www.corpus-nummorum.eu veröffentlicht. Ziel des Beitrages ist darzustellen, welche Ergebnisse die bisherige Arbeit hinsichtlich der Strukturen des Beginns der Münzprägungen in der antiken Region Thrakien bietet. Wo wurden die ersten Münzen geprägt, was ist auf ihnen dargestellt und wie sind die Abhängigkeiten der Münzstätten hinsichtlich Münzfuß, Nominal und Ikonographie zu bewerten?

450. WELLHÖFER, Herbert, Germany

Die Nymphen von Thessalien

Zwischen 450 und 380 v. Chr. gab es in Thessalien, zwischen Larissa und Trikke, eine Reihe von Münzstätten, in denen Ortsnymphen auf die Kleinmünzen geprägt wurden. Sie sind ganzfigurig dargestellt und tragen keine Flügel. Diese Halbgöttinnen beschäftigen sich mit ganz alltäglichen Dingen: Sie holen Wasser, sie werfen die Astragaloi, sie spielen mit Bällen, sie werden bei der Schönheitspflege gezeigt. Ihren hinreissenden Charme und die natürliche Bewegungsfreude haben die Stempelschneider wohl bei den halbwüchsigen Töchtern ihrer Umgebung beobachtet und auf den winzigen Münzen, es handelt sich zumeist um Obole, festgehalten. Diese bezaubernden jungen Mädchen sind in der originellen ikonographischen Vielfalt eine wichtige Quelle für die Stellung der Frau in der damaligen Gesellschaft. Man kann beobachten, dass die strenge Würde und Erhabenheit der Hochklassik durch fröhliche und menschliche Charakterisierung ersetzt wurde. Nirgendwo rund um das Mittelmeer gibt es eine solche Fülle ähnlicher Motive auf so engem Raum. In einer Overheadprojektion werden 18, zum Teil sehr seltene Beispiele aus der Sammlung des Autors im Großformat vorgestellt.

451. WIGG-WOLF, David, Römisch-Germanische Kommission des Deutschen Archäologischen Instituts, Frankfurt, Germany

The origins of the COM mint in Late Antiquity

About AD 383 a series of *solidi* were struck for Gratian, Valentinian II, Theodosius I and Arcadius with the simple mint-mark COM, rather than the usual marks such as TROB, MDOB etc. indicating the location of the mint. The COM mark was then to become the standard form of mint mark for gold, but with the addition of letters identifying the mint in the field of the reverse, e.g. M=D/COM. COM is usually read as *COMitatus*, indicating a mint accompanying the Emperor. The coins can be divided

into two groups on the basis of the style of the obverse bust and minor details of the reverse, and were attributed by Pearce in RIC IX to Milan and Thessalonica. This paper will re-assess the COM issues, looking at the background to them, tracing the origins of aspects of the iconography together with features of the imperial bust, reviewing how the coins sit in the broader context of the coinage of the period, and considering their historical context.

452. WILLIAMS, Daniela, Austrian Academy of Sciences, Austria

Joseph Eckhel and the coinages of Magna Graecia and Sicily: the correspondence with Michele Vargas Macchiucca and the prince of Torremuzza

This paper will investigate the contacts between Joseph Eckhel (1737–1798) and his correspondents from the reign of Naples and kingdom of Sicily. Among the correspondence addressed to Eckhel, today kept in the archives of the coin cabinet of the Kunsthistorisches Museum in Vienna, twenty-eight letters were written by the duke Michele Vargas Macchiucca (1733–1795) from Naples and three by Gabriele Lancillotto Castelli prince of Torremuzza (1727–1794) from Palermo. These documents are important sources for understanding Eckhel's view of the ancient coinages of Magna Graecia and Sicily and allow us to follow the development of his research before the publication of the *Doctrina numorum veterum* (1792–1798).

453. WITTMANN, Matthew, American Numismatic Society, New York, United States of America

Empire of Coins: US Trade Dollars in the Late Nineteenth-Century Pacific

Between 1873 and 1878, the United States minted some 36 million silver dollars for the express purpose of stimulating foreign trade, and with a particular eye towards the Chinese market. Although most numismatists regard this issue as an expensive mistake, and they undoubtedly proved problematic domestically, evidence suggests that US trade dollars were rather more successful abroad than scholars have heretofore appreciated. Indeed, a survey of coins held in the collections of the American Numismatic Society shows that they circulated much more extensively, and for a longer duration, than has generally be appreciated. This paper focuses on the transnational circulation of US trade dollars in the late nineteenth century Pacific, and situates its history within the larger framework of American imperialism in the late nineteenth century.

454. WOJAN, Franck, Société française de numismatique, France - **BLET-LEMARQUAND, Maryse**, IRAMAT-CEB, CNRS Université Orléans, France

Le monnayage d'argent et de bronze d'Elis-Olympie: l'apport des analyses élémentaires (poster)

Les monnaies d'argent et de bronze d'Elis-Olympie conservées à Paris (BnF, département des Monnaies, médailles et antiques) ont fait l'objet d'analyses élémentaires. Les résultats obtenus ont été soit attendus soit surprenants (la série Apollon / Zeus aétrophore étant exclusivement en cuivre).

455. WOLF, Daniel, United States of America

The Bronze Coinage Reform of Ptolemy II Philadelphus

The bronze coinage reform of Ptolemy II describes a group of monetary changes ca. 265 BC, about mid-way through his reign. Students of Ptolemaic coinage have long recognized many of these apparently coincident changes to: quantity and span of denominations, manufacturing technology, design elements, mint locations, and the relationship between weights and values. It is accepted that a transformative bronze coinage reform took place, but much about it remains enigmatic including its manifold specific changes, precise timing, and, in light of its isolation with respect to precious metal coinage, its very purpose. This study intends to improve understanding of the bronze coinage reform's structure and function. The method is to synthesize physical and quantitative data with information about the empire's contemporary economic, military and political processes. This study benefits from new data on metrology, production technology, and value structures of Ptolemaic and other Hellenistic bronze coins, recently discovered coin types and mint locations, and a novel interpretation of the new weight standard. This study's wide analytical scope yields a fresh view of the reform's structure, timing and *raison d'être*.

456. WOLF, Ulrike, Goethe Universität, Frankfurt am Main, Germany

Communicating and expressing power relations in the Western Mediterranean 5th to the 1st centuries BCE: an iconographic and spatial analysis of coin iconography

How was coinage used to express and communicate power, dependencies and alliances in the Western Mediterranean 500-100 BCE? Long distance connections and exchange was well established between indigenous groups (i.e. Iberian, Italic, Etruscan peoples), Greeks and Phoenician traders prior to coinage, as attested by the foundation of *emporia*, colonies and settlements beginning in the 8th century. Roman foreign policy from the 5th century, however, destabilised the *status quo*. At the same time an extensive and diverse minting began, with multiple actors developing different denomination systems using different metals. By the time of the 1st century the Roman *denarius* dominated all forms of currency, more or less supplanting all other coinages. This paper proposes that coin imagery was used as a medium for expressions of power and communicating power relations. This study combines a quantitative approach with GIS to investigate coin imagery, tracing patterns and developments in iconographic themes over time and space. The statistically significant cases are contextualised within the wider historical record, linking the numismatic language of images to the wider pool of iconography employed by other media of communication. By approaching the topic archaeologically, drawing on perspectives from communication theory and material culture studies, this paper aims to demonstrate that coinage was used as a medium to express and communicate power relations.

457. WOLOSZYN, Marcin, University of Rzeszow, Poland / The Centre for the History and Culture of East Central Europe (GWZO), Leipzig, Germany - **BOCHNAK, Anna**, The National Museum in Krakow, Poland

The Sphinx of Slav Sigillography - Dorogichin Seals in their East European Context

In the Byzantine civilization lead seals are ubiquitous. With influence from Byzantium the tradition was adopted in Kievan Rus'; this is documented by thousands of ducal seals and tens of thousands of lead seals, classified as "type Dorogichin", discovered on its territory. Type Dorogichin seals are interpreted provisionally as customs seals. Although the subject of Dorogichin seals was addressed in countless studies they continue to be the "sphinx of sigillography", as aptly described by K. Bołsunowski (1838—1924) one of their earliest investigators. Dorogichin seals are currently investigated by a team of researchers from Poland, Russia and Germany. The aim of this Project is to make a comprehensive, multidisciplinary analysis of a few hundred Dorogichin seals recovered at Czeremo (the medieval stronghold Cherven) in Eastern Poland. This is the second largest group of Dorogichin seals, the largest group was recovered at Drohiczyn, a truly impressive series of about 12,000 specimens. Central place in the Project is taken by a group of Dorogichin held by the National Museum in Cracow. The aim of the Project Team is to analyse and publish a possibly comprehensive corpus of Dorogichin seal finds from Czeremo and provide them with a broad comparative background, East European (Rus') in particular. Selected seals will be subjected to a metallography analysis to determine the chemical content of the lead used in their production. The Project is to conclude with a publication of its results in Polish, English and Russian.

458. WOODS, Andrew, York Museums Trust, United Kingdom

Twenty-first century Numismatics: Google and the Digital Exhibition

York Museums Trust (UK) embarked upon a collaborative project with Google Cultural Institute in 2013 (<https://www.google.com/culturalinstitute/collection/york-art-gallery>). The outcome of this partnership has been the creation of a series of digital exhibitions which showcase the collection to audiences who may never have engaged with it in the physical setting of the museum. This talk will examine the challenges of curating numismatic collections and the possibilities of digital exhibition. The case-study will be the digital work carried out by York Museums Trust in the past two years which has seen new approaches to photography, online collections resources and the creation of a number of digital exhibitions to compliment their physical counterparts. Digital photography and the ever increasing availability of the internet open up possibility for new avenues of curation within museums, particularly of numismatic material which presents challenges in terms of size. This talk will focus upon one of these, digital exhibition in collaboration with Google Cultural Institute, highlighting the possibilities that exist for numismatic collections and arguing that the system can provide a new, dynamic and flexible way of working. The challenges and problems will also be discussed, particularly the issue of combining digital and physical displays into a complementary and coherent form.

459. WOYTEK, Bernhard, Austrian Academy of Sciences, Austria

Framed Roman Provincial Bronze Coins

In her classic handbook "*Roman Medallions*", published in 1944, J.M.C. Toynbee appropriately defined a specific class of monetary objects which she termed 'pseudo medallions'. These are pieces struck from actual coin dies, which differ from coins just in a technical respect. "*Deliberate steps were taken to exclude them from circulation as regular currency, to lift them, in fact, out of the category of coins into that of 'medals'*", in Toynbee's words (p. 25). In order to create 'pseudo medallions', either oversize (sometimes even bimetallic) flans were used, or normal sized coins were subsequently mounted in rims or set into broad grooved frames. While such 'medallised coins' are well documented in the imperial coinage from the first century AD onwards, their rare provincial counterparts have never been studied properly. In this contribution, the phenomenon of framed Roman provincial bronze coins will be examined systematically for the first time. A preliminary overview of the material as well as a structural, geographical and chronological analysis will be presented.

460. WOYTEK, Bernhard, Austrian Academy of Sciences, Austria

Joseph Eckhel (1737-1798) and his numismatic network: FINA Vienna (Plenary session)

This keynote lecture, complementing François de Callataÿ's keynote on the new initiative "*Fontes Inediti Numismatae Antiquae (FINA)*", presents the first externally funded sub-project of FINA. It is a three-year project carried out at the Austrian Academy of Sciences and funded by the Austrian Science Fund (FWF project no. P25282). It investigates the life and work of Joseph Hilarius Eckhel, author of the "*Doctrina numorum veterum*" (8 vols, Vienna 1792–1798), the founding work of ancient numismatics and one of the most impressive scholarly achievements of the Age of Enlightenment in general. The project aims at the publication and numismatic analysis of Eckhel's correspondence, hitherto completely unknown: a most important group of 171 scholarly letters and documents addressed to Eckhel by 38 numismatists and classicists from all over Europe, presently kept in the archives of the Coin Cabinet of the Kunsthistorisches Museum in Vienna, as well as c. 70 letters written by Eckhel, kept in various archives of Europe and the US. These documents cover a broad spectrum of numismatic topics and provide new insight into the development of Greek and Roman numismatics in the Early Modern period.

461. WYSSMANN, Patrick, University of Bern, Switzerland

The Earliest Coins from Samaria – New Vistas on the chronology of a Late Persian-period Provincial coinage in Palestine

Persian-period coins from Samaria have been identified as such not that long ago. They were initially discovered in two large hoards, the 'Nablus Hoard' (IGCH 1504 = CH 9.440) and the 'Samaria Hoard' (CH 9.413), respectively. Both hoards have been published by Ya'akov Meshorer and Shraga Qedar in 1991 (*The Coinage of Samaria*) and 1999 (*The Samaritan Coinage*). These two reference works, which contain basic information about the different issues of the Persian-period coins from Samaria, became a standard and paved way for subsequent research. Detailed chronological aspects, however, have not been addressed by Meshorer and Qedar. They only briefly mention that coin minting in Samaria occurred between 372 and 333/2 BCE. In this paper, the suggested minting period will be critically reviewed and a more detailed sequence, including several minting phases, will be presented. This new chronological framework is based on both, on observations on the hoard evidence and on the epigraphy, iconography and style of the Samaritan coins. The resulting sequence is closely related to major historical events of Fourth-Century BCE Palestine.

462. YALÇIN, Duygu Özlem, Ankara University, Turkey - **ÇİZMELİ-ÖĞÜN, Zeynep,** Ankara University, Turkey

Ancient coin finds from Samosata (Commagene)

Starting from 5000 BCE until the Medieval Period, Samosata was showing a continuous human settlement pattern in its history. Located in southeast Anatolia, on the west bank of the Euphrates River the city became a major intersection of trade routes from the 3rd century BCE onwards. During the Hellenistic period it served as the capital for the Commagene Kingdom until it became the part of the Roman Empire in 72 CE. In 72 CE it was re-established as the provincial capital and the garrison of the *VI Ferrata* and later *XVI Flavia Firma* legions. Samosata kept its strategic importance until the reorganisation of the eastern frontier in the reign of Diocletianus. From that period the city remained as an optional cross point. Before the Atatürk Dam flooded the Samosata Mound in the 1989, the University of Ankara conducted salvage excavations between

1980 and 1987. Hellenistic, Roman and, Byzantine coins that were unearthed by those salvage excavations examined in hope of enlighten our knowledge about this prosperous city of past.

463. YOON, David, American Numismatic Society, New York, United States of America

Evolution of Stylistic Patterns in Pre-Visigothic Tremisses

In 1964, Wallace J. Tomasini published a study of the post-Roman imitative *tremisses* featuring Victory with a palm branch and wreath on the reverse, attributed to the Visigoths and Burgundians. He proposed a detailed stylistic classification and a set of hypotheses about the regional evolution of these styles. To this day, his classification remains the principal system for organizing coins of this series, despite occasional criticism on grounds of inconsistency or excessive subjectivity. This paper re-examines the stylistic relationships within this series using quantitative methods, particularly some that were developed for biological systematics. By comparing the results of multiple phylogenetic and phenetic analyses of the stylistic variability in this series, the problematical portions of Tomasini's classification can be highlighted. At the same time, the use of phylogenetic methods, in combination with the meager additional evidence of recorded find locations since 1964, provides new hypotheses about the stylistic evolution of this series.

464. YORK, Hillery, Smithsonian Institution, Washington, United States of America

Managing Numismatic Collections (poster)

This poster will focus on the joys and challenges surrounding the management of large, interdisciplinary numismatic collections. Emphasis will be placed on the rehousing of numismatic objects, performing inventory and promoting large scale digitization efforts, as well as making collection information accessible to the general public and academic community. One project that will be emphasized is the Rapid Capture digitization project undertaken by the department from October 2014 to March 2015 where NNC staff digitized over 270,000 proof sheets from the U.S. Bureau of Engraving and Printing using a conveyor belt system.

465. ZAJĄC, Barbara, Jagiellonian University, Poland

Circulation Trajan's provincial coins in Europe territory (poster)

Reign of Trajan was the one of the most important period in the history of the Roman Empire, with great development and extending the boundaries of state. In the east provincial territories flourished economic, social and culture life. Currency of this areas had characteristic form compared to imperial coinage. Standards of silver coins were based on the Greek drachma which value was similar to roman *denarius*. Inscriptions were in Greek and iconography was related with politics and culture aspects, characteristic for provincial region. During the reign of Trajan on the East territories were functioning around 190 mints. The one of the most important was in Cappadocian Caesarea in Asia Minor, in which during the reign of Trajan it was two phases of intensification minting activity. Coins from this mint are register in Europe territory. Lycian drachmas were in circulation also. Finds of Trajan's provincial coins are located *inter alia* in Great Britain, Austria, Germany and Poland i.e. both in the Empire and outside its borders. They were used in international and local trade. The main purpose of this presentation is attempt to determine of actual mass of provincial coins struck during the reign of Trajan in monetary circulation, proportion, function and economic relations between coin rate and content of metal. The most important will be combination of finds of Trajan's provincial coins according to archaeological finds and collections to reflect range of them in the Europe territory i.e. outside historical Eastern provinces of the Roman Empire.

466. ZAKHAROV, Evgeny, The State Historical Museum, Russian Federation

On the chronology of the last group of electrum coins of Cyzicus

Very important source for the chronology of coin issues is hoards or separate coins found in the good dated archaeological complexes. Thereby study of the circumstances of the findings of electrum coins of Cyzicus may be useful for the research of its chronology. One of the few hoards of cyzicenes that has solid archaeological context is a Myrmekion hoard of 2003 (CH X, 19). It was found in the wall's base of the shrine of Demeter. According to the archaeological data (amphoras fragments and stamps) it dated 375–350 BC. The hoard includes 99 electrum staters of Cyzicus of II (550–475 BC) and III (475–410 BC) groups and one unique specimen, which can be attributed to the late III or early IV (410–330 BC) group. There is no cyzicenes

of the IV group in the complex. Composition of the Myrmekion hoard and its archaeological date conflicts with traditional chronology of the III and IV groups of cyzicenes accepted modern scholars. The revision of the chronology of the last two groups of these coins is the optimal way for solution of such contradiction. The date of tesauration of Myrmekion hoard (375–350 BC) is a *terminus post quem* for the last (IV) group of electrum coins of Cyzicus that may be dated second half of IV BC.

467. ZANCHI, Pierre, HISOMA UMR 5189, Lyon, France

The coinage of Diocletian sole emperor in Siscia (summer 285 - March 286)

Siscia has been viewed by most scholars as the only imperial mint which did not strike for Diocletian as sole emperor i.e. until Maximian became co-ruler in March/April 286. New coins appeared in trade now evidence by the use of the singular form AVG that the sole Diocletian issued a rare gold and base metal coinage also in Siscia. This in turn leads to redating some existing material of the 3 *officinae* previously attributed to the period of Dyarchy. The coinage of Diocletian sole ruler at Siscia follows the general scheme found with all other imperial mints, two series can be traced also in this mint. The first series recollects types a) associated with his *Adventus* in Siscia after his victory over Carinus mid-285 b) allegories previously used by his predecessors Probus and Carus/Sui. Types listed in Siscia are ADVENTVS AVG (bronze strike of a gold medallion), SPES PVBLICA, ROMAE AETERNAE, PAX AVGVSTI (*aureliani*). Exceptional *aurei* 1/60 lb. showing Diocletian with raised hand (a bust taken from Carinus Siscian coinage) are to be connected with the ADVENTVS AVG medallion. The second series starts early 286 prior to the establishment of the Dyarchy, places Diocletian under the protection of Jupiter *Conservator*. The gold coinage is made of pre-reform 1/70 lb. light-weight *aurei* with standing Jupiter and eagle at his feet which are companions of the long-known *aureliani* of this type.

468. ZAORAL, Roman, Charles University, Prague, Czech Republic

The circulation of gold in late medieval Italy in the light of coin hoards and written sources

The paper examines to what extent the evidence of written sources of merchant and church origin, concerning the gold circulation in late medieval Italy, corresponds with the evidence of coin hoards. 31 published gold coin hoards from the territory of Italy are analysed in an effort to specify a position of main gold coin types in circulation: *fiorini d'oro*, *zecchini*, *genovini*, and Hungarian florins. Another aim of paper is to explain why decreasing supplies of gold in the second half of the 14th century had in Italy a smaller impact on the structure of money in circulation than in other European regions.

469. ZAPOLSKA, Anna, University of Warsaw, Poland

Late Roman Deposits as a Perceptible Sign of Elusive Goldsmiths

During the Great Migration Period, a time of numerous dislocations of Germanic and Baltic tribes in Northern Barbaricum which are hard to describe and interpret, deposits appeared consisting of Roman coins together with other bronze objects – semi-finished products, damaged pieces of jewelry or everyday tools. In many cases the chronological framework of the deposited specimens is very broad – from the early Roman Period until mid-5th century. An extremely important feature of these deposits is the presence of forms from different regions which are combined in them. As a result we face great difficulties in interpreting these finds, especially when lacking reliable archaeological sources which would allow unambiguous attributions. In this paper an interpretation of the deposit from Frombork (ex. Frauenburg), found on the southern Baltic shore, will be presented. It will consider the character of cultural changes taking place in the Baltic region, and the role of Roman coins in Late Antiquity and the Great Migration Period in northern Barbaricum. The importance of interregional contacts between Germanic and Baltic tribes will also be stressed. This contribution is financed by the National Science Centre, Poland, according to decision no DEC-2011/02/A/HS3/00389.

470. ZAWADZKA, Anna, University of Warsaw, Poland

Some Gallic attributes on Roman Republican coins in the light of recent archaeological findings

The *carnyx* and horned helmet are among the most frequent attributes used to invoke victories over the Gauls on Roman Republican coins (cf. F. Hunter, *The carnyx in Iron Age Europe*, *Antiquaries Journal* 81, 2001, 92-92; A. Zawadzka, *Gallic horned helmets on Roman Republican Coins*, *Archeologia* 2009 [2011], 35-43). They are also present on other specimens of Greek and Roman works of the visual arts, as well as in Gallic (and more broadly speaking ‘Celtic’) iconography. However,

unlike the torque (another stereotypical Gallic attribute), they are almost absent from the ancient written sources. Until recently, they were hardly known from the Gallic material culture as well. New archaeological discoveries and the reexamination of some old publications and materials in museum collections are changing the overall picture. This also throws new light on the representations of the *carnyx* and horned helmet in numismatic iconography.

471. Removed.

472. ZIEGERT, Martin, Universität Wien, Vienna, Austria

Aus alt mach neu. Nachahmungen und Legitimationsstrategien in der Münzprägung Vespasians

Der römische Kaiser Vespasian trat als Sieger aus dem Bürgerkrieg im Jahre 69 n. Chr. hervor und regierte das Römische Imperium für weitere zehn Jahre bis zu seinem Tod 79 n. Chr. Er etablierte zusammen mit seinen Söhnen Titus und Domitian eine neue, nämlich die flavische Dynastie. Eine Quellengattung, die das Selbstverständnis der neuen Herrscher besonders widerspiegelt, sind die Münzen. Die Münzprägung Vespasians zeichnet sich durch ein besonderes Phänomen aus: Unter seinen Reversstypen gibt es überproportional viele alte Bilder. Diese stammen sowohl von Augustus und der bilderreichen Münzprägung der späten Republik als auch von den direkten Vorgängern Galba und Vitellius. Vor allem die Übernahmen von Bildern des Bürgerkriegsgegners Vitellius oder des verhassten Nero sind erklärungsbedürftig. Durch die Untersuchung der ikonographischen Rückbezüge soll die spezifische Situation der Flavii als zweiter Herrscherfamilie im Prinzipat deutlich werden. Dabei wird behandelt, ob und welche Rolle und genaue Funktion die Nachahmungen für die weitere Institutionalisierung des Prinzipats und für die Legitimationsgewinnung der neuen Dynastie einnahmen.

473. ZILCH, Reinhold, Academy of Sciences, Berlin, Germany

The numismatic iconography of successor state banknotes in Central- and Eastern Europe, 1918-1939

Banknotes are a part of everyday culture. They are not in the main focus, but they exist in huge numbers and everybody is in close contact to them. So they are playing a specific part to build up national identities. But there are only a small number of studies to compare the development of the banknotes of different countries. There were many similarities in the numismatic iconography of the banknotes of the three empires of Austria-Hungary, Germany, and Russia before 1918. After World War One these empires were destroyed and in the successor states different banknote were designed. But you can arrange these designs into certain types: Austria, Germany and Soviet Russia tried to show the republican existence, but carefully. The new states like Czechoslovakia, Estonia, Latvia, Poland, and Ukraine were digging in the history for the roots of existence. But there were interesting differences. Large states like Poland took portraits of fighters for national freedom of the 19th century. Small states like Estonia and Latvia took pictures from the oldest history but the bigger Czechoslovakia took portraits of modern politicians. To cut a long story short: there are a lot of differences between these states but there is a main trend: the way from the empire-style to art nouveau and after to new objectivity between 1900 and 1939.

474. ZINNÀ, Manuel, Università della Calabria, Italy

Nuove considerazioni e note storiche sulla monetazione di Hipponion e la dea Pandina

La colonia locrese di Hipponion, oggi Vibo Valentia, inizia a battere moneta relativamente tardi, secondo la cronologia tradizionale nel 379 a.C., immediatamente dopo la liberazione cartaginese della città che era sotto il controllo locrese-dionigiano da nove anni. Le monete della I fase riportano la legenda con il digamma che nelle emissioni successive viene abbandonato. È possibile che questo cambiamento linguistico sia riferibile ad un determinato ambito cronologico e ad una fase storica che lo studio monetale può ulteriormente integrare a livello conoscitivo. La prima parte dell'intervento si incentrerà su questo aspetto che finora sembra aver goduto di poca attenzione nel mondo scientifico. La monetazione della città, che sembra essere tendenzialmente desultoria al pari delle fonti, prosegue almeno fino all'inizio del III sec. a.C., quando la storia di Hipponion s'intreccia con quella del popolo Brettii la cui etnogenesi si colloca nel 356 a.C. Nella penultima fase monetale ipponiate appare la dea Pandina che al di fuori di Hipponion è nota solamente in alcune emissioni della vicina Terina. La divinità è stata oggetto di varie interpretazioni che andrebbero riviste e in parte superate analizzando in maniera più analitica, oltre che gli aspetti iconografici della moneta, anche quelli filologici dello stesso termine 'Pandina'. L'argomento appare legato fortemente alla spedizione di Alessandro il Molosso in Magna Graecia e diviene importante per comprendere il ruolo della città di Hipponion durante l'intervento bellico del sovrano epirota.

475. ZVEREV, Sergey, The State Museum of the Moscow Kremlin, Russian Federation

The monetary reforms in Russia in the mid-17th century

The aim of the monetary reform of 1654 was to introduce a set of large and small denominations, the use of copper as a coinage metal. Silver roubles (100 kopeks) made by counter-marking thalers (the weight = 64 kopeks), and half-poltinniks (25 kopeks) struck on thalers cut into four parts were introduced into circulation. Were also released the copper poltiniks (50 kopeks) and altyns (3 kopeks). Public mistrust of unfamiliar new coins made the government abandon its original plan of reform. In 1655 a large high-grade coin was introduced, the efimok with a marks. The European thaler after countermarking with the obverse die of the ordinary kopeck and a small rectangular punch with the date "1655" was equal to 64 kopecks. In 1655 the striking of copper coins modelled on the familiar silver kopecks appears performed in Moscow (2 mints, 1655-1662), in Novgorod and Pskov (1655-1663), in Kuukenoice (1659-1661). Silver roubles, copper poltiniks and altyns of 1654, and groszeviks 1655 remained in circulation at their face value until 1657. Silver efimoks with a marks and half-poltinniks were withdrawn in 1659. The accelerated issue of copper coins led to inflation, which in turn produced the disruption of the economy and the Copper Riot of 1662 in Moscow. In the 15 July 1663 the striking of copper coins ceased and they were redeemed from the public at a rate of 100 copper kopecks to 1 silver kopeck. The circulation of copper kopeks in Siberia was before 26 October 1663.

ROUND TABLES

A) DIVINA MONETA: *Coin finds in religious contexts*

Tuesday, 22nd Sept., 9:00 am-1:00 pm

Conveners:

A (Convener) BURSTRÖM, Nanouschka Myrberg, Stockholm University, Sweden

A (Convener) GULLBEKK, Svein H., University of Oslo, Norway

A(Convener) INGWARDSON, Gitte Tarnow, University of Copenhagen, Denmark

Moderators:

A (Moderator) BURSTRÖM, Nanouschka Myrberg, Stockholm University, Sweden

A (Moderator) INGWARDSON, Gitte Tarnow, University of Copenhagen, Denmark

The round table draws on the international and interdisciplinary research programme “*Religion and Money: the economy of salvation*”. Coin finds in religious contexts open a significant number of questions concerning the conception and use of coins and money, in different geographical and temporal settings. Votive offerings, ritual minting and donations are but a few examples of how coins were, and still are, used as material mediators between humans and gods. We invite speakers to discuss the use of coins and money for religious purposes from an understanding of coins’ particular material aspects (such as metal, size or iconography) in combination with their connotations in light of different socio-cultural phenomena (such as abundance, kingship or protection). Speakers should relate these aspects, material and ideological, to patterns of deposition in religious contexts and to detailed numismatic evidence, drawing on cases of coins from different historical, geographical and numismatic contexts.

Participants:

A.1. AUDY, Florent, Stockholm University, Sweden

A link to the past? The ritual use of Roman coins in Viking Age graves

A.2 BURSTRÖM, Nanouschka Myrberg, Stockholm University, Sweden

Introduction.

A.3. EHRNS*TEN, Frida, National Museum of Finland

A Cheap Salvation? Post-reformational offerings in Finnish churches

In Finnish churches thousands of Early Modern coins have been found over the years. The body of material consists almost solely of very common copper coins of the lowest possible economic value at the time they were deposited or lost. The same pattern can also be seen in ritual deposits outside the church. In the Medieval Catholic Church coin offerings were a central part of the official rituals. During the Reformation some of those rituals were abandoned, but soon reappeared slightly altered inside the Lutheran liturgy. When the church no longer offered direct transcendental help to its parishioners, a new need for folk religion and its related beliefs, practises and security emerged. For centuries, small copper coins were therefore still used as an intermediary when asking God for health, good harvests and peace.

A.4. GULLBEKK, Svein H., University of Oslo, Norway

Medieval Scandinavian Women in Search of Salvation

Archaeological finds from Medieval churches provide ample evidence for a discussion of gender-specific issues related to the organisation of mass and liturgical rituals. I will in particular discuss how men and women were separated within village churches with considerations of women’s ability to provide money-offerings in rural societies, also as regards the use of money in monasteries and nunneries. Did women trust Virgin Mary more than male saints in their search for salvation? In the Gospels, Matthew emphasises that offerings to saints and Christ were of personal nature. However, offerings which were once voluntary became fixed upon the parishioner in Medieval society by customs which had the strict force of law. The coin finds from Medieval churches add up to tens of thousands, each find reflecting an act of worship. This material opens up for a range of different interpretations. One overarching question that will be dealt with in this paper is whether it is possible to see patterns of gender-specific behaviour among these Christian worshippers?

A.5. HORSNÆS, Helle, National Museum, Denmark

Sacred or Secular? The roles of landscape, tradition and social context for the function of Roman coins in a non-Roman environment

The paper will investigate the possibilities to interpret coins that are decontextualized on several levels: they are found outside their primary area of circulation as coins, and they are often found in secondary contexts. Can the archaeological toolbox help us? Can we distinguish between sacred and secular? What conclusions may be drawn from the material characteristics and qualities of the coins themselves? What does the use of coins mean in a non-monetized society? The paper will investigate the roles played by landscape, tradition and social context for the function of Roman coins in a non-Roman environment.

A.6. HOULBROOK, Ceri, University of Manchester, United Kingdom

'So Money Really Does Grow On Trees': the British coin-tree custom

This paper focuses on the British coin-tree custom, a practice which involves the embedding of coins into the trunks of trees for a variety of folkloric reasons. This custom emerged in Scotland during the eighteenth century, having evolved from the similar practices of nail-trees and rag-trees, often employed in healing rituals. However, it was not until the late twentieth century that the coin-tree custom became widespread, appearing across England and Wales. Drawing on historical literary resources, the material evidence of the coin-trees, and ethnographic data collected from the custom's modern-day participants, this paper questions what accounted for the coin's emergence at the fore-front of British tree rituals. The physical attributes of coins will be examined, such as their shapes, materials, and the images they bear, together with a consideration of economic issues, in the endeavour to understand how and why the coin became indisputably the most popular modern-day ritual deposit in Britain.

A.7. KELLEHER, Richard, The Fitzwilliam Museum, Cambridge, United Kingdom

Pilgrims, Pennies and the Ploughzone: folded coins in Medieval Britain

The abundance of newly recorded metal finds, available to scholars through the Portable Antiquities Scheme (PAS) database, has led to major advances in the interpretation of a variety of forms of material culture in England and Wales. Obscured within the many thousands of retrieved Late Medieval coins are a significant group of material that shows evidence of bending or folding. Historical accounts, largely in the form of miracle records from saints' shrines, have come to dominate the debate on the motives for, and functions of, these pieces with little recourse to the material evidence of the coins themselves. This paper aims to redress this imbalance. It introduces evidence to suggest a more complex and holistic level of interaction(s) with folded coins than as simply the material 'contract' for a pilgrim's vow to visit a saint's shrine. Excavated contextual evidence brings a new perspective but it is the rural ploughsoil finds that are of singular interest and suggest a hitherto unappreciated form of devotional behaviour in Medieval Britain.

A.8. KEMMERS, Fleur, Goethe University, Frankfurt am Main, Germany

Worthless? The practice of offering counterfeit coinage in Roman religious contexts

In the third and fourth centuries, several episodes of large-scale counterfeiting are known in the Roman world. These so-called 'barbarian imitations' seem to have filled the gap created by the inability of the central authorities to provide sufficient coinage to the more outlying regions of the Empire. Studies have shown that in comparison to finds from secular contexts these imitation coinages are particularly common on Roman religious sites. A standard explanation is that for the dedicant these coins provided a win-win situation. The dedicant fulfilled his or her religious duty, and s/he got rid of an otherwise worthless coin. But how can it be, that a coin which was seemingly unacceptable for or unfavoured in secular contexts was acceptable within a divine sphere? The answer might potentially be found in the material characteristics of the imitations: a very distinct alloy and a remarkable iconographic style, which might have been particularly appropriate for human-deity transactions.

A.9. NAISMITH, Rory, University of Cambridge, United Kingdom

Pecuniary Profanities? Money and ritual in the Early Middle Ages

A long-held tenet of studies on the role of money has been that it is antithetical to gifts and socially-driven exchanges, tainting them with commercially-driven calculation. This paper aims to challenge that view by looking at the role of money in rituals, especially of a religious nature, in the Early Middle Ages. Examples will be drawn from archaeological and written sources to illustrate that money was widely used in all acts of exchange besides commerce, including almsgiving, donations to the Church and much more besides. The volume and details of these cases should lead us to ask not just if all these transactions were really tainted by money, but rather if money was – in a sense – tainted by its religious and social role. Building on work by Jacques Le Goff and others, I will consider the ramifications for money as a socially-charged phenomenon, which could carry a range of meanings in different settings.

A.10. PERASSI, Claudia, Università Cattolica del Sacro Cuore, Milano, Italy

Baptism and Coins in Late Antiquity. Written sources and numismatic finds reconsidered

Coins were used in Roman times in numerous rites, as material mediators between men and gods. They were placed under the foot of the ships' mast, sealed in foundation deposits, used as amulets. Yet no Roman written sources tell us anything about these ritual uses of coins we know from archaeological discoveries. Conversely, a canon of a Spanish council (the so-called "Elvira Council") dated between 4th and 6th century peremptory forbids the custom of putting coins into the baptismal fonts by those who are baptized. Coin finds in some early baptismal structures from Italy, Crimea and Malta have confirmed the ritual of throwing coins into the fonts. But the accordance between written and material sources is just apparent. While the

canon seems to qualify the coins as a payment for the bishop, numismatic contexts suggest that coins were put into the fonts for their symbolic value and not for economic purpose.

A.11. WIGG-WOLF, David, Römisch-Germanisch Kommissions des Deutschen Archäologischen Instituts, Frankfurt/Main, Germany
Final Comment

**B) Numismatics in the 21st century:
Jobs, careers, professions for the young generation of coin enthusiasts**

Wednesday, 23rd Sept., 11:00 am-1:00 pm
(dedicated to the memory of Herbert A. Cahn on the centenary of his birth)

Conveners:

B (Convener) ARNOLD-BIUCCHI, Carmen, President of the INC

B (Convener) KIRSCH, Arne, President of the IAPN

Moderators:

B (Moderator) ARNOLD-BIUCCHI, Carmen, President of the INC

B (Moderator) CACCAMO CALTABIANO, Maria, Università di Messina, Italy

The XVth International Numismatic Congress gathers numismatists – scholars, students, museum curators, collectors, and dealers, anybody interested in coins – and presents a unique opportunity to emphasize the importance of the study of coins as primary historical sources, as art works and as collectibles. The purpose of this Round Table is to reflect of the state and role of our discipline in the 21st century and to discuss the many possibilities it opens and the kind of real jobs it can offer to the young generation. We have invited young enthusiastic colleagues from the main branches of our field who have been successful in finding a position through their pursuit of numismatics to talk about their experience.

Participants:

B.1. ARNOLD-BIUCCHI, Carmen, President of the INC – **KIRSCH, Arne**, President of the IAPN

Welcome and introduction

B.2. D'OTTONE, ARIANNA, Università di Roma 'La Sapienza', Italy

How I came to teach (Islamic) Numismatics

B.3. DUYPAT, Frédérique, Bibliothèque Nationale de France

Numismatists in a museum: the case of the Bibliothèque nationale de France

B.4. GUEST, David, Classical Numismatic Group, London Office, United Kingdom

My Life as a Coin Dealer so far

B.5. HAHN, Silke, Institute of Numismatics and Money History

Studying Numismatics in Vienna at the independent Institute of Numismatics and Money History

B.6. KAMPMANN, Ursula, Coins Weekly

Doing whatever you like and finding somebody to pay you: The daily routine of a freelance numismatic journalist

B.7. PUGLISI, Mariangela, Università di Messina, Italy

From the D.R.A.C.M.A. Project to the D.I.A.N.A. Atlas: a personal scientific growth through teamwork

C) *Networking Roman coin data repositories*

Tuesday, 22nd Sept., 3.00 pm-6.30 pm

Convener:

C (Convener) WIGG-WOLF, David, Römisch-Germanisch Kommissions des Deutschen Archäologischen Instituts, Frankfurt/Main, Germany

The Round Table follows up on a Round Table held at INC XIV in 2009 in Glasgow “*Networking Coin Find Data Repositories*”. The aims are twofold. Firstly, to present recent advances in the technology of the World Wide Web, in particular the semantic web and linked open data, which have revolutionised ways of networking data-repositories. Secondly a number of exemplary, key projects will be presented, demonstrating these new possibilities and technology. There will be a focus will be on coin hoards, which are now the subject of several large-scale projects, including a discussion of how they should be recorded in order to facilitate interoperability of data repositories.

Participants:

C.1. ACKERMANN, Rahel C., Inventar der Fundmünzen der Schweiz, Swiss Academy of Humanities and Social Sciences, Berne, Switzerland

Introduction

C.2. BRANSBOURG, Gilles, American Numismatic Society, New York, United States of America *Nomisma.org*, *OCRE: Online Coins of the Roman Empire*

C.3. CODINE, Florence, Bibliothèque Nationale de France, France

A database for French coin hoards: Trésors Monétaires online

C.4. GHEY, Eleanor, The British Museum, London, United Kingdom

Crisis or Continuity. Hoarding in Iron Age and Roman Britain

C.5. MEADOWS, Andrew, New College, Oxford University, United Kingdom

Final Comment

C.6. WALTON, Philippa, The Ashmolean Museum, University of Oxford, United Kingdom

Coin Hoards of the Roman Empire Project

C.7. WIGG-WOLF, David, Römisch-Germanisch Kommissions des Deutschen Archäologischen Instituts, Frankfurt/Main, Germany - **TOLLE, Karsten**, Goethe University, Frankfurt/Main, Germany

Ontology Based Data Access for Coin Find Repositories

D) *The new LANDscape of Greek numismatics. Unifying a discipline through Linked Data*

Thursday, 24th Sept., 9.00 am-1.30 pm

Conveners:

D (Convener) DUYPAT, Frédérique, Bibliothèque nationale de France, Paris, France

D (Convener) MEADOWS, Andrew, New College, Oxford University, United Kingdom

The past decade has seen an explosion in the creation of online resources in the field of Greek numismatics. Few of us are aware of all of them; some are difficult to find; and there is a danger that their fragmentation will make research more difficult rather than easier. The purpose of this round table is to examine: 1. how we may make the many different online initiatives in Greek numismatics speak to each other more clearly, and 2. how we may develop new tools that can draw on the work of existing projects and scholarship to make our research lives easier. The Round Table will bring together a number of speakers engaged in different types of online initiatives, explore the ways in which a Linked Data approach may bind them together, and propose an initiative to create an online type-corpus of Greek coinage.

Moderators:

D (Moderator) HOWGEGO, Chris, The Ashmolean Museum, Oxford, United Kingdom

D (Moderator) WIGG-WOLF, David, Römisch-Germanisch Kommissions des Deutschen Archäologischen Instituts, Frankfurt/Main, Germany

Participants :

D.1. DUYRAT, Frédérique, Bibliothèque nationale de France, Paris, France

Introduction: Different tools, same framework

The catalogue of the Greek collection of the BnF

D.2. GRANDJEAN, Catherine, Université de Paris-Sorbonne, France

Excavations from Argos: coins from excavations online; a project

D.3. GRUBER, Ethan - VAN ALFEN, Peter, American Numismatic Society, New York, United States of America

Linked Data and the creation of a corpus

D.4. MARKOU, Evangeline, National Hellenic Research Foundation, Athens, Greece

The corpus of Cypriot silver coinage

D.5. MEADOWS, Andrew, New College, Oxford University, United Kingdom

Digital IGCH

Introduction: LAND, LOD, nomisma.org, learning from Rome?

D.6. PETER, Ulrike, Brandenburgische Akademie der Wissenschaften, Berlin, Germany

The corpus of Thracian coinage

D.7. PICARD, Olivier, Université de Paris-Sorbonne, France

The excavation coins of Thasos

D.8. REINHARD, Andrew, American Numismatic Society, New York, United States of America

The future of publishing Greek numismatic

D.9. WARTENBERG, Ute, American Numismatic Society, New York, United States of America

The corpus of electrum coinage

E) ICOMON:

Museum Numismatics & Collections Care: Best practice updates from the field

Tuesday, 22nd Sept., 9.00 am-1.30 pm

Convener:

E (Convener) NOMIKOU, Effrosyni, ICOMON

Discussant:

E (Discussant) HARRIS, Mieka

A networking workshop that will bring together institutions and professionals to exchange ideas, skills and know-how. Delivered in two parts, the *ICOMON Round Table* aims to: - Explore best practice examples - Canvass the needs of the professional community of numismatists - Create a forum to forge collaborative working relationships The themed discussions are: 1. Conservation and collections management 2. Education, interpretation and outreach. The outcome of the workshop will be a list of recommendations and action points for *ICOMON* to facilitate and support collaboration between museum professionals internationally.