

# The 7th Joint Meeting of Nomisma.org and ECFN 2018

## Abstracts

May 3th, Thursday

14:30 **Presentation of ARCH Project**

Frédérique Duyrat | Bibliothèque nationale de France  
Andrew Meadows | University of Oxford  
Pere Pau Ripollès | Universitat de València

ARCH: *Ancient Coinage as Related Cultural Heritage* will establish, for the first time, an overarching platform for the study, curation, archiving and preservation of the monetary heritage of the ancient world. The project will develop one geographical focus – Pre-Roman Spain and southern Gaul – in the form of a specific online reference tool (Monedaiberica) that will draw upon public collections and objects in commerce, as well as a program of research designed to exploit the opportunities offered by a Linked Open Data infrastructure. This will examine questions of monetary and cultural connectivity and interaction across the borders of Spain and France in antiquity, in collaboration with leading scholars in the monetary and cultural history of this geographical area, working as Associate Partners based in Oxford, Paris, Bordeaux, Orléans, and Valencia.

15:00 **Data Quality Fingerprints in Nomisma.org Linked Open Data**

Karsten Tolle | Goethe-University

Data Quality is important for the acceptance of reusing Linked Open Data. In my talk, I will show our approaches within the DFG funded project Corpus Nummorum Thracorum (CNT). As main contribution to the Nomisma.org community, we generated a rule system based on the Nomisma.org ontology that can be applied to any Nomisma.org dataset without changes. The system therefore can serve as a data quality fingerprint for datasets.

In some cases, it is possible to use additional sources of information, for example the images or descriptions in natural language which are attached to the data. Using Natural Language Processing tools and algorithms for images, we are exploring what other solutions for data quality improvements exist.

15:10 **Corpus Nummorum Thracorum. Problems of typology**

Ulrike Peter | Berlin-Brandenburgische Akademie der Wissenschaften

In the paper I will discuss our definition of a coin type and describe the challenges of doing so: What variations in motif or legend are possible within a defined type? What distinguishes a type from a subtype or variant? Are there differences in defining Greek coin types of the Archaic-classical, Hellenistic or Roman period?"

15:30 **Data management for the MIB project with NUMISDATA**

Manuel Gozalbes | Museu de Prehistòria de València

The task of collecting data on ancient coins of the Iberian Peninsula began 40 years ago. In the last 15 years, it has been necessary to design databases to gather information and keep it organized. Within the framework of the ARCH project, NUMISDATA, a numismatic management tool for researchers, is ready to gather all the previous information of the MIB project into a single management system. The current project needs to import and manage over 100.000 coins with images and supplementary information on hoards, finds, auctions, collections and bibliography. NUMISDATA is the tool designed for that challenge.



VNIVERSITAT DE VALÈNCIA  
Facultat de Geografia i Història



ASA nomisma.org



Supported by  
Real Casa de la Moneda  
Fábrica Nacional  
de Moneda y Timbre

15:50 **A short update on OSCAR (Online Swiss Coin Archive)**

Christian Weiss | Swiss National Museum

Taking OCRE, CRRO and Pella as a role model, OSCAR aims to become a online-typology for Swiss medieval and modern coinage. Starting in 2018 and planned to go live within three years, the first few months were mainly devoted to gather the data for the type descriptions of the 17th to the 21st centuries and clarifying inconsistencies. This is a short update on the project and its possible impacts on nomisma-IDs for medieval and modern numismatics in general.

May 4th, Friday

09:00 **The PAS in 2018: What next?**

Andrew Brown | The British Museum

As the PAS enters its third decade, some of the highlights of the last year demonstrate the continued importance of recording archaeological material from around the UK and reveal new information about coin loss in Britain. With more than 250,000 Roman coins now recorded through the scheme, we have to consider what we do with this vast dataset and what new information it can reveal about the spread of coinage over long periods of time. Focussing particularly on discrete groups of coins, notably early Roman bronze issues of specific 'British Association', I will look at how we can potentially use the PAS to reveal the spread, distribution patterns, or indeed concentrations, of these specific coin types and what insight this might offer with regard to coin use in Roman Britain.

09:20 **Studying and preserving numismatic heritage: the CyReNe-Project**

Alessandro Cattaneo | Università degli Studi di Padova

Cyrenaica and its main centre, Cyrene, have had a great importance in the ancient world during both Greek-Hellenistic and Roman periods. This importance is clearly visible also through its numismatic production, which is of considerable variety and interest, with few equals in the ancient Mediterranean. In spite of this, the numismatic attention given to the region has sometimes been inadequate and its coinage has remained marginalised in the context of the many mints active during the antiquity.

In addition to this, the historical-political events that have taken place in Libya since 2011 and the resulting continuous state of clashes and civil wars, have also led to the destruction and looting of part of the cultural heritage of the region. The numismatic material, which is easy to export illegally and then resold, has certainly been one of the hardest hit. The growing numbers of specimens sold by auction houses and other sellers in the last seven years are obviously a direct consequence of this.

The "CyReNe-Project "(Cyrenaican Research Numismatic e-Project), using the digital resources that are becoming more and more popular in the humanities and through a global digital archiving of these specimens, has the aim to create a tool, with a dual purpose of study - and consequent enhancement - and of safeguarding, at least at the level of virtual data, the Cyrenaican numismatic heritage. Some interesting results have already been achieved.



09:40 **Digital visibility of numismatic contributions to Research projects: DeAtlasTir and CVB**

Alicia Arévalo | Universidad de Cádiz  
Elena Moreno | Universidad de Cádiz

This speech aims to propose the numismatic methodological approaching undertaken for two research projects, currently in progress and focused in South Hispania.

On the one hand, for the project of the National R+D+I (HAR2014-58326-P) From the Atlantic Ocean to the Tirreno Sea. Atlantic Baetican and Lusitanian ports and its commercial relations to Ostia Antica, we have elaborated a Data Base of the coin findings from the ports of Ossonoba, Balsa and Myrtilis. In a second step, we have accomplished the geo-referencing of these findings in a GIS that will be an optimum complement to the other archaeological studies carried out in this same project.

On the other hand, we present the Andalusian Research Plan (Ref. HUM2065) Roman cities of the Baetica. CORPVS VRBIVM BAETICARVM (I) (CUB). In this case, we have assumed the elaboration of two kinds of numismatics *schedae*, the first for the minting cities and the other about monetary circulation in the urban ambits. This project also includes a free access online application where it can be checked the compendius of the different *schedae* elaborated for the project, among of them, there will be the numismatic ones.

10:00 **New developments in the project KENOM**

Mario Schlapke | Thüringisches Landesamt für Denkmalpflege und Archäologie

A short presentation of new developments in the KENOM-project

10:10 **NUMISDATA: management, research and publishing system for numismatic heritage**

Juan Francisco Onielfa Veneros | Render  
Alejandro Peña Carbonell | Render

Since 1998 we are developing Dedalo, an open source project for the management, research and publishing of Cultural Heritage. In the field of numismatics, we are building a specific model and configuration of Dédalo called Numisdata. This build is designed for the specific management of numismatics files and inherits Dédalo basis concepts of linked records, implementation of thesauri, multi-language, permanent backup at field level, customizable access for records and fields and powerful resources management, among other features.

Numisdata is based on an ontology created for developing «Moneda Ibérica» and «Sardinia» projects and is fully compatible with Nomisma. The ontology manages the data and the programming objects, it interprets the data and build the code for show, search, edit, export and transform the whole archive information. Our core technology builds a new paradigm of Linked Data for documents working in a NoSQL model. The information is stored in JSON format, and the model has three abstraction layers: for data, ontology and programming. In the same way as Dédalo, Numisdata is a long-term development project regularly updated with new features and capabilities. Our objective is to achieve a flexible tool for managing, researching and publishing numismatic catalogues of different kinds.

10:30 **The NUMiD project**

Karsten Dahmen | Münzkabinett, Staatliche Museen zu Berlin

The Münzkabinett at the Staatlichen Museen zu Berlin is one of the most important numismatic collections in the world. 2017 marks the tenth anniversary of its ongoing project to digitalise its collections and implement new methods of working on the semantic web. 2017 also sees the birth of NUMiD, the Network of University Coin Collections in Germany (*Netzwerk universitärer Münzsammlungen in Deutschland*).



- 10:40 **The oldest coin hoard from Denmark - a presentation**  
Helle Horsnæs | Nationalmuseet
- During detector surveys amateur archaeologists have recovered what is today the earliest denarius hoard from Denmark.
- 11:30 **Hoards as a primary historical source - Based on the example of the Emona and Čentur hoards**  
Leilani Štajer | University of Ljubljana
- The aim in this presentation is to highlight the significance of hoard findings as a primary historical source. I am going to discuss the level of reliability of such analysis and the interpretation of antique hoards, as well as present the possible traps that lead to an insufficiently critical interpretation. This will be presented on two examples - the most important Roman hoards found in Slovenia - the Emona and the Čentur hoards.
- 11:40 **The Iberian mint of Itirta. Hoards and coin findings between III-I Centuries BC.**  
Jose Manuel Torregrosa Yago | Universitat de València
- ILTIRTA (the current city of Lleida, Cataluña) produced coins along three centuries. Iberian imitations of Emporion silver drachmae and their fractions which copied the small silver coinage issued by the city of Massalia, conformed part of this money that was used to cover the expenses of the War for the romans. Moreover, minted silver denarius and quinarius and an important volume of bronze coinage. We have studied nineteen hoards: eight with drachmae, eight that contains denarius and only three with bronze coins. Almost, the total amount of casual coin findings in the Iberian Peninsula reaches more than three hundred coins.
- 11:50 **Project Finds of Roman Coins in Poland and connected with PI. Małopolska Team. Whatever happened to gold coins and other questions**  
Jarosław Bodzek | Jagiellonian University
- The project “Finds of Roman Coins in Poland – Lesser Poland” is part of the larger project “Finds of Roman Coins in Poland and connected historically with PL” (FRC PL), directed by Professor Aleksander Bursche from the Institute of Archaeology of the University of Warsaw and funded by a grant from “The National Programme for the Development of Humanities” of the Polish Ministry of Science and Higher Education. Its timescale runs from 2013 to 2017. The project’s aim is to create an online database that gathers into one place all material associated with Roman coin finds from both Poland and some regions of neighbouring countries that once formed part of the Polish Lithuanian Commonwealth. The team working on finds in Lesser Poland includes Jarosław Bodzek, Kamil Kopij, Emilia Smagur, Jerzy Kliś and postgraduate students studying at the Department of Classical Archaeology of the Jagiellonian University – Szymon Jellonek, Barbara. Zajęc and Paulina Koczwara. The paper goal is to present some important problems concerning the finds of Roman coins in Małopolska.
- 12:10 **Some considerations about grave coin finds in the territory of Slovenia**  
Alenka Miškec | National museum of Slovenia
- Our analysis included around 1200 coin finds from Roman graves in the territory of present-day Slovenia. We analyzed the frequency of coins by emperors, material, and nominal values, as well as their preservation. And we also verified the theory stating that coins placed in graves in the 1st and 2nd centuries were also selected because of the personifications depicted on them, with Fortuna, Salus, Felicitas, and Libertas supposed to be the most frequent ones.

12:20 **The Coin Hoards of the Roman Empire project (CHRE): 11,313 hoards and counting! Recent progress and linked data**

Marguerite Spoerri Butcher | Ashmolean Museum, Oxford

Cristian Gazdac | Romanian Academy, Institute of archaeology and Art History Cluj-Napoca

The aim of the current phase of The Coin Hoards of the Roman Empire project, directed by C. Howgego and A. Wilson, is to collect summary hoard data from all Roman provinces, as well as to input a selection of hoards at the level of the individual coin. More than 11,313 hoards and single gold finds have now an entry on our web app (<http://chre.ashmus.ox.ac.uk>) and our network of international collaborations extends to 22 countries.

Our presentation will encompass two aspects of recent work.

The first one will focus on the use of linked data within our project, exemplified through the case of Switzerland, for which we now have an increased number of hoards described at coin level, thanks to a collaboration with the Swiss Inventory of coin finds (SICF). Beyond linked data at coin level, our bibliographical records are now being linked to the online library of the German Archaeological Institute iDAI.bibliography / ZENON (<https://zenon.dainst.org>). Collaboration currently extends to implementing online retro-links from Zenon to CHRE.

The second one will present recent progress made by team members of the project, but also external collaborators or project partners. Focus has been put to extend our geographical coverage to a larger number of countries including the Balkans, but also Turkey, France, the Netherlands or Italy to name only a few. Furthermore, a lot of work has been accomplished in validating previously entered hoards and cleaning data.

12:40 **Tomares Hoard, Planning and Program for the Research**

Ana D. Navarro | Museo Arqueológico de Sevilla

The hoard of Tomares is not completely exceptional, as similarly rich hoards from this period have been found elsewhere in the Empire. The precise characterisation of the hoard of Tomares will have to wait until a larger number of coins have been examined. The find comprised a total of 19 *amphorae*, 10 of which were broken as a consequence of the machine work. The other 9 were complete and remained sealed. These *amphorae* belong to the well-known Dressel 23 type, which was generally used for the transportation and storage of olive oil. The first problem is to determine the exact number of coins in the hoard, given that the average weight of the *amphorae* is 35 kg. These hoards include pieces dating to the Tetrarchy and from later, into the 4<sup>th</sup> century and the reign of Constantine. It is the largest hoard ever to have been found in the *Diocesis Baetica* and the whole of *Hispania*. This attests to the economic and strategic importance that Southern Spain and the Guadalquivir Valley still had in the Late Empire.

12:50 **Coin finds in "La Casa dels peixos" a domus in Saguntum**

Tomás Hurtado Mullor | Universitat de València

We expose the coins appeared in a *domus* in Saguntum with a life dated between the end of the 1st century AD until the beginning of the fourth century, now musealized. The numismatic material includes one Republican coin and Roman Empire coins, including one denarius of Vespasianus.

**13:00 EMC: New developments**

Martin Allen | Fitzwilliam Museum, University of Cambridge

At the meeting of ECFN/Nomisma.org in May 2017 I gave a presentation on 'Finding the Past: Twenty Years of EMC'. There have been significant new developments since that time. A conference on EMC at the Fitzwilliam Museum, Cambridge, in October 2017 promoted new uses of EMC data. EMC is now closely involved with a Leverhulme Trust funded project, Lordship and Landscape in East Anglia AD 400–800, which began in November 2017 and is analysing finds from Rendlesham and other sites in East Anglia. The EMC/SCBI website is being redesigned and is expected to be relaunched before the meeting in May 2018.

**14:30 Introduction to Nomisma.org  
Questions and answers on Nomisma.org**

Andrew Meadows | University of Oxford

David Wigg-Wolf | Römisch-Germanische Kommission

Nomisma.org is a collaborative project to provide stable digital representations of numismatic concepts according to the principles of [Linked Open Data](#). These take the form of http URIs that also provide access to reusable information about those concepts, along with links to other resources. The canonical format of nomisma.org is RDF/XML, with serializations available in JSON-LD (including geoJSON-LD for complex geographic features), Turtle, KML (when applicable), and HTML5+RDFa 1.1. While the URIs provided by nomisma.org are stable, the project is in progress and subject to constant expansion and ongoing correction. This is particularly the case for the information provided about each nomisma.org identifier. The information provided by nomisma.org has been provided by a wide community of scholars and institutions.

May 5th, Saturday

**09:00 Photographing Coins**

Ulrich Werz | Niedersächsisches Landesamt für Denkmalpflege

An necessary part of the documentation of coins is, besides identification and inclusion in a databank, the creation of a photographic record. In order to photograph large numbers of coins from finds and collections, a plug-in and batchfile have been created, which allow the backgrounds to be removed from coin images, the images to be fixed in a ratio of 1:1 and these to be given a title. The essential data relating to the individual coins, including their findspot and archaeological context, is then appended to the photographs as metadata.

**09:10 IIIF, Web Annotation, and Numismatics**

Ethan Gruber | American Numismatic Society

The International Image Interoperability Framework (IIIF) is a community-driven open specification for image APIs and metadata. Initially developed by university libraries for publication of high resolution images of Special Collections materials, it has been adopted by numerous Nomisma.org partners, including the American Numismatic Society, the KENOM project, Bibliothèque nationale de France, Harvard Art Museums, and others. The implementation of IIIF within the Nomisma data model enables zooming of high resolution images in Online Coins of the Roman Empire (OCRE) and similar type corpus projects. It also allows "packaging" of all relevant images pertaining to a single coin type, which will also facilitate the annotation of monograms, symbols, and iconographic motifs (by linking to relevant URIs), paving the way to new modes of inquiry and coin description. This presentation will provide a brief overview of the specification, its current use cases in OCRE, and the potentials for standardized annotation.



09:20 **Converting Germany's Roman Coin Finds to LOD - an exemplary workflow for the FMRD project**

Timo Kissinger | Akademie der Wissenschaften und der Literatur – Mainz

The project „Fundmünzen der römischen Zeit in Deutschland“ (FMRD) was created in 1953 to record all Roman coins found in Germany. From 1986 onwards FMRD was funded by the Academy of Sciences and Literature | Mainz. The project was completed in 2009. In its 56 years of existence FMRD published over 40 volumes, the first one published in 1960. At the moment these volumes are only available as printed books. In order to make the research results of FMRD accessible to a broader audience and to open up this rich numismatic resource for further use by the scientific community, an exemplary workflow has been developed that converts the coin finds of the printed volumes to Linked Open Data (LOD). The coin finds from the excavation of the cathedral at Trier were selected as a first use case.

The first step of the workflow extracts the coin data from PDF documents as XML. During development this process proved to be challenging due to the large number of inconsistencies in the original data. After that, the XML is transformed to a standard compliant TEI/XML document. In a next step, the number of data columns is normalized and the coin data is then transferred into a LOD model using the [nomisma.org](http://nomisma.org) ontology. The modeled data is finally converted from XML into RDF with the help of the XTriples webservice. The resulting semantically enriched data set can be queried with SPARQL and data visualizations can be created easily using JavaScript libraries like sgvizler.

09:30 **Rethinking French numismatics : terminology, typology, nomisma**

Florence Codine | Ecole Pratique des Hautes Etudes

The EPHE is currently in the first stages of creating a database for French numismatics. In the first year of this project, the members of Marc Bompaire's seminar on medieval and modern numismatics and monetary history have been discussing the terminology and the structural requirements of such a database. Beyond the simple addition of new nomisma IDs, this has led to several ideas regarding possible evolutions of the nomisma ontology.

09:40 **Representation of Marcus Aurelius and Lucius Verus and their targeted audience**

Martin Baer | Universität Wien, Institut für Numismatik und Geldgeschichte

Past studies on the representation of the co-emperors Marcus Aurelius and Lucius Verus were mainly concentrated on the analysis of coin types. Thus the importance of a topic were only built on the amount of coin types in RIC, BMC or MIR, which is problematic because the definition of a coin type differs from each catalogue. Additionally, we can only speculate for whom the coin types were made for.

A much better way of understanding the importance of coin types is using coin hoards, which are abundant since the end of the 2nd century AD. Quantifying and tracking the coins from hoards gives us an impression whether the coin types were made for a broader audience or for a specific one. In my presentation I will therefore quantify the data from coin hoards, compare the representation of the co-emperors, and take a look at where the coins went to. For this study my analysis will be based on more than 200 hoards containing aurei and denarii from all over Western Europe.

10:00 **Julio-Claudian Coin Hoards from Hispaniae. Problems, Method of Work and Digital Dissemination**

David Martínez Chico | Universitat de València

This conference talk presents part of our thesis developed on the coin hoards found in Hispania and dated between Augustus and fifth century A.D. Obviously in this work, countries like Spain and Portugal are included. The first two centuries are finished and at present we are collecting the hoards of next century, where there are other mints and not only Rome. In accordance with this, we discuss work guidelines, problems, method of work and, finally, digital dissemination in Coin Hoards of the Roman Empire Project's app.

After making the summaries of each coin hoards, according to their coins, mints, metal and monetary type, we can see an interesting evolution of coin supply, injected from Rome and accompanied with the Iberian and Hispanic provincial coinages during the Julio-Claudian dynasty. For other chronologies, we can affirm that the Hispanic provincial coinage circulated until the first half of the 3rd century A.D. A great and scarce example for this last one is 'Los Torrejones' hoard, from Yecla (Murcia), thanks to coin minted in Cartago Nova by Caligula.

10:10 **The Sardinia website. Coin finds in Terralba area**

Pere Pau Ripollès | Universitat de València

In the previous ECFN meeting we presented the database of the findings in Terralba area, Sardinia. It was built with the data management system NumisData. Now we present the visualisation of the results via a website. The structure covers all fields related to coins and findspots through maps and diagrams.

The present study assembles diverse pieces found in a total of 143 archaeological sites, including the recent findings of Truncu 'e Molas excavation (Terralba, Oristano), discovered during the campaigns of 2007, and those published by R. Zucca (1987: 142-143). The coins studied amount to a total of 396 specimens, excluding the pieces of dubious classification and poor preservation, the final catalogue consists of 364 coins. The findspots have been identified as Punic farms, necropolis and Roman *villae*. This website demonstrates that the coin databases using NumisData management system can be easily transformed in an efficacious research tool (website) for scholars, as well as enthusiasts.

10:20 **I.Num.Sic. A new project on coin epigraphy**

Mariangela Puglisi | Università degli Studi di Messina  
Jonathan Prag | Merton College, University of Oxford

I.Sicily is an online TEI-XML (EpiDoc) corpus of the inscriptions of ancient Sicily (<http://sicily.classics.ox.ac.uk> and <https://isicily.wordpress.com>). The corpus has been live and the focus of ongoing editing and development since January 2017. Currently the corpus contains inscriptions on stone in all languages from the Archaic to the Late Antique periods, but is extending coverage to include inscriptions on other media. The project places a strong emphasis on autopsy and direct collaboration with Sicilian museums and archaeological authorities. Within this framework, we aim to develop a parallel and integrated corpus of the legends on ancient Sicilian coins (I.Num.Sic. = Inscriptiones Nummorum Siciliae), exploiting the text-focused potential of EpiDoc and seeking to integrate coin legends within a holistic study of ancient Sicilian textual culture. The time appears to be ripe for such a project, both from a technical perspective - the existence of the Nomisma and EpiDoc communities, and the active projects to develop SigiDoc and Linked Open Data standards for EpiDoc - and from a numismatic perspective - the imminent completion of Historia Numorum3, Sicily and Adjacent Islands. This presentation will sketch the aims and framework of the project and explore some of the conceptual challenges facing a project focused on cataloguing legends.



10:30 **Unification of databases: difficulties and solutions/suggestions. A practical case, Museo Casa de la Moneda**

José María Pérez García | Museo Casa de la Moneda

In the museum Casa de la Moneda of Madrid our stock exceeds two hundred thousand exhibits with the permanent exposition and the archives. The variety of it is quite diverse, as we have coins, medals, postal stamps, bank notes, drawings, engravings, machines, etc. at our disposal. In order to unify the pre-existing documentation of all the exhibits an exclusive operating system has been developed but the results were not the expected ones because it did not make the collection of data easier in a clear and concise way. In addition, we deal with the difficulty of constantly receiving new samples from the production of the FNMT. We are currently working on creating a unified and efficient system which allows for including new samples and which is more accessible and thus able to show the precise information of each collection.

11:30 **Iberian numismatics in context**

Paula Granados | The Open University

From the 19th century onwards, coins started to gain recognition as archaeological objects. Since then, numismatics has constituted itself as a main discipline within the field of History and the study of the different types of currency has become a foremost source of information. Traditional approaches in Spanish numismatics focused mainly on the cataloguing of the rich collections, however lacking any connection between the coin specimen and its archaeological context. Current approaches are looking for new ways to link the specimen not just with similar types but also with its cultural context as well as other archaeological remains that could bring some new information about both the minter and the coin itself.

In this scenario, Digital Humanities are taking the lead on proposing new ways to provide the numismatic record with a relevant context. During the last decade, traditional data management systems (i.e. graph or relational databases) proved their efficiency in gathering and making accessible large amounts of data. The Hesperia project for example provides access to a significant corpus of paleo Hispanic inscriptions and coin legends online (Granados 2017). Nevertheless, traditional databases present limitations in the access, processing, querying and general interoperability of the information.

Linked Open Data technologies have proved to be a successful alternative to overcome these restrictions. My research explores the current landscape and technological offer of archaeological data coming from the Iberian Peninsula including coins, sculptures and epigraphy and looks into venues for improving upon it regarding the question of cultural contact in Early Roman Baetica. Initial research has proved that Spanish archaeological data is still hardly accessible online, institutional databases constitute closed-world data silos that allow very little access to the information and impede the data querying and processing. This paper will expand on the current state of the art and will present some possible measures to overcome such problems.

11:50 **VINDONISSA re-visited**

Rahel C. Ackermann | Swiss Inventory of Coin Finds

Vindonissa is the only legion's camp in today's Switzerland. The military presence has a huge impact on the coin circulation in our country. But the Vindonissa coins finds are but partially published. In a joint project of the SICF and the local archaeological service we (re-)study all findings 1950-2016 and bring the core data together in our database.



**12:00 Tokens and Token Moulds in Roman Ostia**

Clare Rowan | The University of Warwick

While the lead tokens and token moulds of the city of Rome have seen some focus in previous scholarship, there has been significantly less attention paid to the lead tokens and marble moulds in the port of Ostia. This paper presents the ongoing efforts to catalogue the tokens and moulds found in the city as part of the ERC Project "Token Communities in the Ancient Mediterranean". Tokens and moulds have been recorded online according to Nomisma ontology and the principles of Linked Open Data, and are connected to detailed descriptions of find spots. This overview of finds, the first created for Ostia, reveals that Rome and its port shared a 'token making tradition' and provides some suggestion as to the possible uses of these otherwise elusive objects.

**12:20 Recent developments and future challenges in studying ancient and Byzantine weights (Pondera Online)**

Lysiane Delanaye | Université catholique de Louvain

Charles Doyen | FNRS / UCLouvain

This presentation aims to describe the most recent developments in the Pondera Online Project.

**12:30 Barbarian coinage: the online corpus of the Visigoths**

Ruth Pliego | Institute for Advanced Study - Paris

In recent years, there has been a significant interest on the cultural heritage and European identity and one of the challenges of the Strategic Research Agenda is digitizing Europe's cultural heritage aiming to make available online the collections conserved in museums and other institutions. In this context some of those, principally in the framework of Numisma.org, have developed interesting thematic projects with the coinage of the Roman world being the main subject. Although in recent times new projects contemplate the coins of other historical periods (e.g. Greek and Iberian coinage), the only thematic resource related with the Migration Period is The Early Medieval Corpus (Fitzwilliam Museum, Cambridge), which is the first attempt to collect all the coins found in the British Islands (410-1180). This paper focuses on the importance of establishing an online corpus of the coinage of the Early Middle Age that includes globally the coinage of the emerging Germanic kingdoms. Despite the difficulty that such work entails, thanks to a fellowship at the Institut d'Études Avancées of Paris it has been possible to start this project, using for the pilot phase a modest coinage and involved in a controversial in the Spanish historiography: the so-called Visigoth copper. Taking into account that an increasing number of museums and cultural institutions have incipiently put online their numismatics funds, in the mid-term, this online corpus would include the gold Visigothic coinage, as well as series minted by other Migration Period peoples.

**12:50 Use of ancient coins in East-Central Europe in the medieval and modern periods - a new numismatic project**

Arkadiusz Dymowski | University of Warsaw

The use of ancient coins, first of all the Roman ones, in East-Central Europe in the early Middle Ages and on until the modern period, as a phenomenon spanning several consecutive historical periods, demands an interdisciplinary approach. A study into the research problems will need to be conducted outside of the schemata of research limited to just one chronological period or to just one category of sources. The new project conducted at the University of Warsaw focuses primarily on numismatic research, it will also encompass research drawing from fields such as history, archaeology and ethnology, particularly in the context of the Middle Ages and the modern period. Two aspects of the research problem will need to be considered. First of all, one must examine the sources of ancient coins used in East-Central Europe throughout the Middle Ages and the modern period. Secondly, the project focuses on establishing the functions of ancient coinage during the times between 7th and the turn of 18th century.

13:00 **The New Material Evidence of the Umayyad Conquest of Hispania, 711-756. The Leads Seals**

Tawfiq Ibrahim | Real Academia de la Historia

The recent discovery, in the last four decades, of more than a 150 lead seals in the Iberian Peninsula and the Gallic Narbonne all clearly covering the period of the Umayyad conquest and their governors has been a major contribution to a difficult, controversial and very passionately debated historical period. A period which was only covered very late in chronically foundational recalling's, in Latin and Arabic, done mostly a couple centuries later and more. To these last there is one very short but important exception, the only one composed in the Peninsula contemporary to the actual event, the anonymous Cronica de 754. It is this last, a very deeply pained but very objective lament as viewed from the perspective of the subjected and conquered which seems to fully concord to the forceful events, the military and economic, that these seals seem to cover.

Previous to the discovery of these lead seals the only undisputable material evidence of this pivotal historical period had been the coinage. Certainly a important material evidence well studied since the 19th century covering its early sequential time development: Latin, bilingual and Arabic. An important evidence which aside, from its great quality, metal content and esthetic epigraphy, only gives us very limited punctual information, mostly a generic indications of a general geographic area (Hispania, Hesperidia and the enigmatic al-Andalus), the yearly Hidjra dating and a single always repeated ideological/religious message.

