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*Roundtable

S02 Kelsey M Reese, Kathryn Harris, Using GIS modeling to solve real-world archaeological problems

Jade d'Alpoim Guedes

S02-01	Jade d'Alpoim Guedes	Constructing agricultural frames of reference: An example from Highland Southwest China
S02-02	Katia Francesca Achino, Juan Antonio Barceló	Using geostatistical modeling to solve spatio-temporal questions
S02-03	Kathryn Harris, Iza Romanowska, Benjamin Davies, Stefani A Crabtree	Applied Agent-Based Modeling in archaeology: When and why?
S02-04	Mike Green	Spatial analysis and predictive modelling and modern clandestine burials
S02-05	Kelsey M Reese	From the empirical to the conjectural: Settlement patterns on the Mesa Verde landform
S02-06	Dita Auziņa	Studying site construction processes through visibility analyses: The case of Aguas Buenas, Nicaragua, a pre-Hispanic (400-1525 AD) mound complex
S02-07	Anita Casarotto, Tessa D Stek, Ruud van Otterloo, Jan Sevink	Assessing visibility and geomorphological biases in archaeological field surveys: A case study on an early Roman colonial landscape in Central-Southern Italy
S02-08	Stephanie E Metz, Harald Stadler, Thomas Bachnetzer	Glacial Archaeology in the Austrian Alps (GAAA)

S02-09	Joe Ree, Olivia Mavrinac, Tobias Richter	Look before you walk: Simulation and adaptive sampling in archaeological survey
S02-10	Gail Michele Higginbottom, Roger Clay	New statistical tests determining the likely reality of a connection between stone circles and astronomical phenomena
S02-11	Tsoni Kolev Tsonev	Least cost path analysis and conditional perception of prehistoric travelers

S03 Emma Slayton, Crystal Safadi Exploring maritime spaces with digital archaeology: Modelling navigation, seascapes and coastal spaces

S03-01	Melinda Allen, Benjamin Davies, Alex Morrison, Andrew McAllister	Modeling prehistoric maritime interactions in East Polynesia
S03-02	Gjermund Steinskog	Reconstructing and modelling the Stone Age landscape in Southeastern Norway
S03-03	Emma Slayton, Jan Christoph Athenstädt, Jan Hildenbrand	Uncovering routes to Grenada: Exploring possible routes between mainland South America and the Southern Lesser Antilles
S03-04	Paweł Cwiąkała, Kasper Jan Hanus, Karolina Matwij, Wojciech Matwij, Łukasz Misk, Wojciech Ostrowski	Looking for the lost harbor. Role of non-invasive archaeological methods in the reconstruction of the seascape of an ancient city Paphos
S03-05	Adam Kevin Benfer	Simulating Pre-Hispanic canoe navigation in Lake Cocibolca, Nicaragua
S03-06	Manuela Ritondale, Gaia Pavoni, Roberto Scopigno, Marco Callieri, Matteo Dellepiane	Evocative virtual exploration of underwater sites: Issues and approaches
S03-07	Crystal Safadi	A space and time analysis of the Early Bronze Age Levantine Littoral

S03-P1	Alejandro García Moreno, Manuel R. González Morales, Igor Gutiérrez Zugasti, Alejandro Cearreta, David Cuenca Solana	Changing coasts, changing worlds. A preliminary approach to the evolution of coastal landscapes at the Asón river basin (Cantabria, northern Spain) during the Pleistocene–Holocene transition
S03-P2	Eveline Kiki Kuijjer, Rosemary Helen Farr, Robert Marsh, Ivan David Haigh, Erik van Sebille	Exploitation of prevailing winds and currents by the earliest known seafarers, reaching and colonizing Australasia c 50 000 years ago
S03-P3	Cátia Sofia Machado Teixeira, João Pedro Pereira da Costa Bernardes, Célia Maria Alves Gonçalves	Using GIS modeling to reconstruct the urban landscape of the Roman city of Ossonoba
S03-P4	Moritz Mennenga, Hauke Jöns	The first web based viewer for archaeological underwater sites in Europe: The Splashcos–Viewer

S04 Evy Berg Databases and archives: How do we handle the digital archives?

S04-01	Isto Huvila	No one's business: Negotiating the value of archiving archaeology in Sweden
S04-02	Evy Berg, Stian Finmark, Christer Vinje Gimse	From active database to archive: Case of a Sites and Monuments Register
S04-03	Annabel Lee Enriquez, Alison Dalgity, David Myers	Ensuring cultural heritage data longevity with the Arches Heritage Inventory and Management System
S04-04	Cristina Barroso Cruz, Ana Seabra, Filipa Neto	Row, row, row your boat gently... upstream: A methodological approach to access Portuguese bioarchaeological data using a computer database
S04-05	Emily Nimmo, Peter McKeague	Digital archives: More than just a digital skeuomorph?

S04-P1	Øyvind Eide, Arianna Ciula, Cristina Marras, Patrick Sahle	Modelling between digital and humanities: Thinking in practice
S04-P2	Ian Johnson	Sustainability = separation: Keeping database structure, domain structure and interface independent
S04-P3	Ana Seabra, Cristina Barroso-Cruz, Filipa Neto	Bioarchaeology module—Loading please hold... Recording human bioarchaeological data from Portuguese archaeological field reports

*** S05 Gary Lock, Agiatis Benardou, Costis Dallas, Paul Reilly, Jeremy Huggett Unstable futures/potential pasts: Scenarios for digital computing 2020**

S05-01	Ann Degraeve	Everyday reality and the multidirectional digital future in urban archaeology—The Brussels challenge
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S06 Miguel Carrero-Pazos, Alia Vázquez-Martínez, Benito Vilas-Estévez, Miguel Busto-Zapico Computer tools for depicting shape and detail in 3D archaeological models

S06-01	Rimvydas Laužikas, Albinas Kuncevičius, Tadas Žižiūnas, Egidijus Žilinskas	Automated heritage monitoring software prototype implementing 3D technologies
S06-02	Diego Jiménez-Badillo, Mario Canul Ku, Salvador Ruíz-Correa, Rogelio Hasimoto-Beltrán	A machine learning approach for 3D shape analysis and recognition of archaeological objects
S06-03	Miguel Carrero-Pazos, Benito Vilas-Estévez, Alia Vázquez-Martínez	AsTrend: A las point based methodology for micro surfaces depicting

S06-04	Edgar Francisco Román-Rangel, Diego Jiménez-Badillo	Application of Computer Vision algorithms for automatic classification of archaeological artefacts
S06-05	Samantha Thi Porter, Kele Missal, Leszek M Pawlowicz	A comparison of methods for creating 3D models of obsidian artifacts
S06-06	Sorin Hermon, Laura Longo, Dante Abate, Giusi Sorrentino, Natalia Skakun	Les gestes retrouvés: A 3D visualisation approach to the functional study of Early Upper Palaeolithic grinding stones
S06-07	Alia Vázquez-Martínez, Benito Vilas-Estévez, Miguel Carrero-Pazos, Arturo de Lombera Hermida, Ramón Fábregas-Valcarce, Xosé Pedro Rodríguez-Álvarez	A methodological approach to the study of prehistoric cave engravings: The case of Cova Eirós (Lugo, Spain)
S06-08	Elizabeth Craig-Atkins, Jenny Crangle, Dawn Hadley, Peter Heywood, Tom Hodgson, Steve Maddock, Robin Scott, Adam Wiles	The digital ossuary: Rothwell (Northamptonshire, UK)
S06-09	Vera Moitinho de Almeida, Valentina Vassallo	O brother, where art you? A quantitative approach using 3D models and geometric morphometrics: The case study of the Ayia Irini terracotta figurines
S06-10	Tommaso Empler, Adriana Caldarone	From survey to 3D modeling to 3D printing: Bramante's Nymphaeum Colonna at Genazzano
S06-11	Mikhail V Vavulin, Olga V Zaytceva, Andrei A Pushkarev	3D Reconstruction of Koch, Russian rowing/sailing boat of the 17th Century

S07	Jens-Bjørn Riis Andresen	Integrating 3D photogrammetric data in the field: Challenges, implications and solutions
S07-01	Mohamed al-Farhan, Ahmad al-Hasanat, Mohamed Shalaby, Luca Passone, Thomas Levy, Neil Smith	RAPID Aerial Scanning of UNESCO cultural heritage sites in the Kingdom of Saudi Arabia
S07-02	Carsten Meinertz Risager	Digital workflow on a selection of Danish excavations in the Århus area—With special emphasis on the use of 3D recording
S07-03	Kristin Eriksen, Almut Schülke	The 3D photogrammetry documentation of the Mesolithic grave from Brunstad, Norway
S07-04	Cecilia Falkendal, Ingebjørg Njos Storvik, Kevin Wooldridge	Using 3D photogrammetry in the field: An example from Kvåle Sogndal, Norway
S07-05	David Stott, Matteo Pilati, Carsten Meinertz Risager, Peter Jensen, Casper Skaaning Andersen, Jens-Bjørn Riis Andresen	Supercomputing at the trench edge: Expediting image based 3D recoding
S07-06	Andrei A Pushkarev, Olga V Zaytceva, Mikhail V Vavulin, Anna Y Skorobogatova	Creation of an Early 19th century Siberian ship 3D model
S07-07	Martijn van Leusen, Gary Nobles	3D spatial analysis: Beyond extrusion and sectioning
S07-08	Matteo Pilati	Enhancing evidence and re-evaluating interpretations with 3D GIS and image-based 3D replicas: The case of Borggade (Denmark)
S07-09	Kasper Jan Hanus, Łukasz Miskz, Wojciech Ostrowski, Weronika Winiarska	In the fields and on the screens. 3D documentation for the excavations at Paphos Agora, Cyprus

S07-10	Jerzy Sikora, Piotr Kittel	Closing a gap with simple toy. How using a tablet affected documentation workflow on the Rozprza ring-fort excavation
S07-11	Åsa Berggren, Anders Gutehall	The documentation of Neolithic flint mines—An experimentation of methods
S07-12	Nicolo' Dell'Unto, Giacomo Landeschi, Jan Apel	Back and Forth through the contexts: 3D Geographic Information Systems in support of field documentation
S07-P1	Anna Maria Kubicka	Underwater archaeological remains open to public diving—Close range photogrammetry as digital preservation and complex documentations of despairing relicts
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S08 Philip Verhagen, Monica de Cet Modelling approaches to analyse the socio-economic context in archaeology II: Defining the limits of production

S08-01	Tuna Kalayci	Putting production landscapes into context: A multi-faceted case study from Upper Mesopotamia during the Early Bronze Age
S08-02	Maria Coto-Sarmiento, Xavier Rubio-Campillo, José Remesal	Quantifying change: An evolutionary approach to interpret the amphorae production in the Roman Empire
S08-03	Irmela Herzog	Boundaries of agrarian production in the Bergisches Land in 1715 AD
S08-04	Jamie Joyce, Philip Verhagen	Factors of production: Investigating land and labour as limiting factors in agricultural production in the Dutch Roman limes zone via agent-based modelling
S08-05	Monica De Cet	Socio-economic analysis and GIS modelling: A pilot study from rural society in Northeastern Italy

S08-06	Simon Carrignon, Jean-Marc Montanier, Jerome Michaud, Xavier Rubio-Campillo	Co-evolution of culture and trade : Impact of cultural network topology on economic dynamics
S08-07	Francesca Cadeddu	Defining boundaries: A GIS-based approach to the Sardinian Bronze Age
S09	César González-Pérez, Patricia Martín-Rodilla, Ruth Varela	Archaeological Information Languages and Notations
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S09-02	Igor Bogdanović, Capuzzo Giacomo, Berta Morell, Juan Antonio Barceló Álvarez	Towards a formalisation of spatio-temporal relationships in chronometric databases

S10 James Stuart Taylor, Sara Perry, Nicolò Del'Unto, Åsa Berggren Theorising the Digital: Digital Theoretical Archaeology Group (digiTAG) and the CAA

S10-01	Sara Perry, James Taylor	Theorising the digital turn in archaeology
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S10-04	Matteo Pilati	Epistemological considerations on image-based 3D representations: Bridging the paradigms through the objectification of field interpretation
S10-05	Dominik Lukas	How raw is raw data?
S10-06	Leigh Anne Lieberman, Gregory Tucker	Communication in archaeological fieldwork: Responses to a digital workflow
S10-07	Gareth Beale, John Schofield	The lives of digital machines: Evaluating the significance of historic computing machinery
S10-08	Katie Campbell	Digital interpretive technologies: A way into difficult heritage in the Middle East and Central Asia?
S10-09	Teija Oikarinen	Trends in digitalisation of archaeology: Interdisciplinary and archaeological viewpoint
S10-10	Jeremy Huggett	The apparatus of digital archaeology
S10-11	Piraye Hacigüzeller	Deep maps of digital, post-representational archaeology
S10-12	Lorna-Jane Richardson	Bringing digital sociology to digital archaeology

S11	Julian Richards, Franco Niccolucci, Holly Wright, Kate Fernie	Supporting researchers in the use and re-use of archaeological data: Continuing the ARIADNE thread
S11-01		Introduction to the session
S11-02	Maria Theodoridou, George Bruseker, Maria Daskalaki, Martin Doerr	Methodological tips for mappings to CIDOC CRM
S11-03	Christophe Tuffery, Achille Felicetti, Patrick Jard, Nicolas Holzem, Thomas Guillemard	An essay of mapping archaeological land-record system used by Inrap with CIDOC-CRM and CIDOC-CRMarchaeo extension using 3M online tool
S11-04	Cesar Gonzalez-Perez, Patricia Martin-Rodilla, Elena Epure	Formalisation and reuse of methodological knowledge on archaeology across European organisations
S11-05	David Bader, Aleksandra Michalewicz, Oded Green, Jessie Birkett-Rees, Jason Riedy, James Fairbanks, Anita Zakrzewska	Semantic database applications at the Samtavro Cemetery, Georgia
S11-06	Franca Debole, Nicola Aloia, Christos Papatheodorou, Dimitris Gavrilis, Carlo Meghini	A Catalog for archaeological resources
S11-07	Philipp Gerth, Wolfgang Schmidle, Sebastian Cuy	Using semantic technologies for the deep integration of research items in ARIADNE
S11-08	Elizabeth Fentress, Michael Johnson, Florence Laino, Stuart Eve	Fasti Surveys

S11-09	Mark Mudge, Carla Schroer	The advantages of integrated 3D photogrammetry and Reflectance Transformation Imaging empirical acquisition
S11-10	Manuela Ritondale, Gaia Pavoni, Roberto Scopigno, Marco Callieri, Matteo Dellepiane	Best practices to re-use remote sensing data coming from marine geophysical surveys for the 3D reconstruction of underwater archaeological deep-sites
S11-11	Christopher Power, Andrew Lewis, Helen Petrie, Julian Richards, Katie Green, Mark Eramian, Ekta Walia, Brittany Chan, Isaac Sijaranamual, Maarten de Rijke	Digging into and re-using image data for archaeology
S11-12	Dimitris Gavrilis, Eleni Afiontzi, Johan Fihn, Olof Olsson, Sebastian Cuy, Achille Felicetti, Franco Niccolucci	A data integration infrastructure for archaeology
S11-P1	Valentina Vassallo, Sorin Hermon, Giusi Sorrentino, Uros Damjanovic	Combining analytical and digital data in archaeology: Towards a multidisciplinary ontological solution. The Salamis terracottas case study
S11-P2	Mark Mudge, Carla Schroer	New tools for Digital Lab Notebook creation for use in Reflection Transformation Imaging

S12	Carlo Bianchini, Alfonso Ippolito, Carlo Inglese, Luca James Senatore	Documentation interpretation and communication of Digital Archaeological Heritage
S12-01	Carlo Bianchini, Giulia Pettoello	Multi-shape archaeological modeling and communication
S12-02	Ruth Varela	A methodology for the analysis of graphical representations in archaeology and some preliminary results
S12-03	Vid Petrovic	Developing a workflow for analysing and annotating reconstructed models of underwater sites
S12-04	Martina Attenni, Carlo Bianchini, Alfonso Ippolito	Emerging technologies for archaeological heritage: Knowledge, digital documentation, communication
S12-05	Anne Moreau, Federico Nurra	Towards a European standard for spatial data management for archaeological heritage: Experiences in France and Italy
S12-06	Julia Maria Chyla, Marzena Ozarek-Szilke, Wojciech Ejsmond	Comprehensive field survey: Multidisciplinary approach for a field prospection
S12-07	Carlo Bianchini, Alfonso Ippolito, Carlo Inglese	New actualities for Mediterranean ancient theatres: The Athena Project lesson
S12-08	Donato Maniello, Valeria Amoretti	Handle digital data to turn them into immersive experience using the augmented reality
S12-09	Valeria Pescetti, Juan Torrejón Valdelomar, Alois Hinterleitner, Wolfgang Neubauer	Interpretative 3D mapping of large urban archaeological landscapes: The use of ESRI CityEngine for the interpretation of Ground Penetrating Radar data
S12-10	Michael Hess	Multimodal data fusion for the non-destructive assessment of the Baptistery di San Giovanni in Florence, Italy

S12-11	Marco Carpiceci, Carlo Inglese, Fabio Colonnese	The Exedra of Goreme OAM: An ocean of points to be explored
S12-12	Giulio Poggi, Mirko Buono	Enhancing archaeological interpretation with volume calculations. An integrated method of 3D recording and modeling
S12-13	Paola Derudas, Maria Carla Sgarella	A new approach for the study and presentation of an archaeological context not traditionally exploitable. Applying a fast but extensive 3D survey to the Bisarcio case study, a Medieval and Post-Medieval cemetery (Sardinia)
S12-14	Tommaso Empler	Digital Archaeological Dissemination: Eleniana Domus in Rome
S12-15	Michela Cigola, Arturo Gallozzi, Leonardo Paris, Emanuela Chiavoni	Integrated methodologies for knowledge and valorisation of the Roman Casinum city
S12-16	Giacomo Landeschi, Jan Apel, Stefan Lindgren, Nicolò Dell'Unto	An exploratory use of 3D for investigating a Prehistoric stratigraphic sequence
S12-17	James Miles, Hembo Pagi, Andres Uueni, Jüri Pärtna	The building survey of Kaasan Church
S12-18	Angela Bosco, Andrea D'Andrea, Massimiliano Nuzzolo, Rosanna Pirelli, Patrizia Zanfagna	A virtual reconstruction of the sun temple of Niuserra: From scans to BIM
S12-19	Susanne Rutishauser, Ralph Rosenbauer, Tim Arni, Fabienne Kilchör, Alexander Sollee	Virtual Cilicia Project: Digital globes for communicating digital archaeological heritage
S12-20	Carlo Inglese, Mario Docci, Alfonso Ippolito	Representing Archaeological Architecture—RAA

S12-21	Paolo Di Pietro Martinelli, Valeria Valentini	Visual stratifications: Different levels of representation in relief of archaeological heritage
S12-22	Antonio Pizzo, Carlo Inglese	3D model of Roman architecture in Lusitania. Archaeology and classification of architectural heritage
S12-23	Fabrizio Ivan Apollonio, Elisabetta Caterina Giovannini	Virtual Reconstruction Information Management (VRIM): Some considerations on scientific 3D models
S12-24	Luca J Senatore, Carlo Bianchini	After the paper: Potential and problems in the documentation and communication of archeology in the Information Age
S12-P1	Akihiro Kaneda	How to classification?—A trial examining the effectiveness of an elliptic Fourier descriptor for Japanese archaeological studies
S12-P2	Susanne Rutishauser	Urbanism in the Cilician Plain from Chalcolithic to Byzantine Period

S13 Johanna Stoeger, Eleftheria Paliou, Undine Lieberwirth Computational approaches to ancient urbanism: Documentation, analysis and interpretation

S13-01	Eleftheria Paliou	Digital archaeology and the science of cities: Some observations on the application of spatial interaction models to the study of Minoan urbanism
S13-02	Hanna Stöger	A tale of two city blocks from Ostia, the port-town of Imperial Rome
S13-03	Scott Branting, Tuna Kalayci	Kerkenes Dag: Materializing an Imaginary City
S13-04	Chiara Piccoli	From data visualization to hypothesis generation: An integrated approach for the study of past cityscapes

S13-05	Jacopo Turchetto, Giuseppe Salemi	On the attack of Constantinople! The Crusaders and the maritime walls of the Golden Horn: A matter of visibility?
S13-06	Kayeleigh Sharp	Computational approaches for studying cultural coexistence in Peru's urban landscape: Contributions and questions
S13-07	Mariza Christina Kormann, Stella Katsarou, Dora Katsonopoulou, Gary Lock	On roof construction and wall strength: Non-Linear Structural Integrity Analysis of the Early Bronze Age Helike Corridor House
S13-08	Undine Lieberwirth, Axel Gering	3D GIS in archaeology—A microscale analysis
S13-09	Sven Straumann	Understanding a Roman insula by the aid of GIS—The Insula 30 in Augusta Raurica (CH)
S13-10	Kristine Stub Precht	Hand drawn section drawings analyzed in real 3D environment
S13-11	Mark A Locicero	Liquid footprints: Water, urbanism, and sustainability in Roman Ostia
S13-12	Kasper Jan Hanus	The waters of life. Digital approach towards the reconstruction of the small scale water management of Angkor (Cambodia)
S13-P1	Sabrina Amaducci	Forum Boarium survey
S13-P2	Francesca Fulminante, Alessandro Guidi, Sergi Lozano, Luce Prignano, Ignacio Morer	Geographical and cultural networks to better understand urbanization processes in central Italy (1175/1150–500 BC ca)
S13-P3	Till Frieder Sonnemann	Patterns and recognition: Mapping indigenous settlement topography in the Caribbean

S14	Iza Romanowska, Stefani Crabtree, Benjamin Davies	Can you model that? Applications of complex systems simulation to explore the past
S14-01	Stefani A Crabtree	Agent-based modeling and complexity science: The next step in archaeological theory?
S14-02	Alice Williams	How agent-based models can be used to investigate the evolution of social complexity in the past: A test of circumscription theory in the Valley of Oaxaca
S14-03	Benjamin Davies, Simon Holdaway, Patricia Fanning	Simulating archaeological landscape formation to understand late Holocene population dynamics and mobility in arid Australia
S14-04	Jean-Marc Montanier, Xavier Rubio-Campillo	Reinforcement learning for decision making in agent-based models
S14-05	Colin D. Wren, Chloe Atwater, Kim Hill, Marco Janssen, Curtis Marean	An agent-based approach to weighted decision making in the spatially and temporally variable South African Palaeoscape
S14-06	Iza Romanowska	The versatileist's story of human dispersal: Climate fluctuation, adaptation and the evolution of human uniqueness
S14-07	Phil Riris, Fabio Silva	Dates and dispersions: Examining the spatio-temporal boundaries of the Guaraní expansion into the La Plata basin with Monte Carlo methods
S14-08	Andrea Zanotti, Richard Moussa, Jean-Pierre Bocquet-Appel	An agent-based modelling approach to a complex problem: Economics and demography of the first farming expansion in the Balkans
S14-09	Ericson Hölzchen, Christine Hertler	An agent-based modeling framework for Out of Africa hypotheses
S14-10	Fabio Silva	Testing archaeological narratives of the spread of rice cultivation in Asia

S14-11	Florencia Del Castillo	An agent based empirical model of collective seasonal hunting
S14-12	Jan Zipser	The emergence and process of formation of the La Tène culture settlement system in Upper Silesia (Southern Poland and Northern Czech) in the light of the simulation modelling See page 49
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S14-14	Juan Antonio Barceló, Florencia Del Castillo Bernal	Everything seems possible: Exploring the parametric space of a simulated prehistoric scenario
S14-15	Fulco Scherjon	Evolving hominins in HomininSpace—Genetic Algorithms and the search for the perfect Neanderthal
S14-16	Xaver Rubio-Campillo, Rinse Willet	Content or context? Model selection of settlement growth models using entropy maximization
S14-P1	Elizabeth M Gallagher, Peter J Bentley, Stephen J Shennan, Mark G Thomas	The origins of agriculture: Mathematical models, cooperation and the rise of social inequality

S15 **Stuart Eve, Catriona Cooper** **Interpretations from digital sensations? Using the digital sensory turn to discover new things about the past**

S15-01	Catriona Cooper	Auralization: What can acoustics tell us about digital lived experience?
S15-02	Piotr Dziewanowski, Janusz Różycki	From the largest to the smallest: The use of the latest technology in digitalization of the objects from the collection of the National Maritime Museum in Gdańsk

S15-03	Lawrence Shaw, David John, Harry Manley, Gary Underwood	More than just a pretty picture: A review of the use of 3D printing, touch tables and virtual environments to engage the public with Lidar and the archaeology of the New Forest, U.K.
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S16 **Tom Brughmans, Daniel Weidele** **Networking the past: Towards best practice in archaeological network science**

S16-01	Tom Brughmans	A guide to good practice for archaeological network science
S16-02	Lieve Donnellan	Exploring formal SNA approaches to funerary contexts in Early Iron Age Italy
S16-03	Ignacio Morer, José Remesal, Albert Diaz-Guilera, Luce Prignano, Daniel Martin Arroyo	Wine trade from Roman Crete: Onomastic–geographic network analysis
S16-04	Donat Wehner	Least-Cost Networks and Network Analysis: Modelling trade relations in early medieval East Central Europe
S16-05	Thomas Huet	Geometrical and planar graphs in ancient iconography studies, a heuristic tool
S16-06	Discussion	
S16-P1	Analia Andrade, Joan Anton Barceló, Florencia Del Castillo	Artificial Neural Networks to estimate Paleotemperatures in North Patagonia (Argentina) based on micromammals sequences

S17	Mark Groenhuijzen, Philip Verhagen	The road not taken: Modelling approaches to transport on local and regional scales
S17-01	Devi Taelman, Dimitrij Mlekuž	Transport and trade: An energyscape model and transport network approach for trade in Roman times
S17-02	Luce Prignano, Francesca Fulminante, Sergi Lozano, Ignacio Morer	A network model for the evolution of terrestrial connections in Central Italy (1175/1150–500 BC ca)
S17-03	Pau de Soto	Network analysis to understand the Roman commerce. Connectivity and transport costs of the Roman networks
S17-04	Karim Sadr	Comparison of regional and local transport networks in 17th and 19th century AD pre-colonial stone-walled structures in the southern Gauteng Province, South Africa
S17-05	Jacopo Turchetto	Modelling the road network of central Cappadocia (Turkey): A matter of 'cost' and 'visibility'
S17-06	Mark Groenhuijzen, Philip Verhagen	Testing the validity of network analysis results in research on local transport networks
S17-07	Diego Torres-Iglesias	The need of topographic restitution in local mobility analysis
S17-08	Joan Canela Gràcia, Núria Otero Herraiz	From sea to land: Reflections on freight traffic during the Iron Age of the Northeastern Iberian peninsula (6th to 1st centuries BC)

S19	Anne Moreau, Federico Nurra	New technologies and archeology : The impact of the digital revolution
S19-01	Martin Kermit, Jarle Bauck Hamar, Øivind Due Trier	Towards a national infrastructure for semi-automatic mapping of cultural heritage in Norway

S19-02	Dimitri Schreiber, Dominique Meyer, Dominique Rissolo, Falko Kuester	Autonomous stereoscopic photosphere system for archaeological site virtualization
S19-03	Karl Hjalte Maack Raun, Duncan Paterson	Systematic literature review on automated monument detection: A remote investigation on patterns within the field of automated monument detection
S19-04	Anja Wutte, Peter Ferschin, Georg Suter	Spatial analysis of Ancient Egyptian Monuments. Case study: Late Period private funerary monuments of Thebes
S19-05	Dominique E Meyer, Jamie Hodgkins, Fabio Negrino, Christopher E Miller, Caley M Orr, Falko Kuester, Stefano Benazzi, Marco Peresani, Julien Riel-Salvatore, David Strait, Matthias Czechowski	Optimization in the co-registration of large point clouds for archaeological visualization
S19-06	Angela Bosco	3D survey for archaeology: When the solution can be a problem
S19-07	Ana Predoi, Lutz Schubert, Keith Jeffery	Interpolating 3D stratigraphic information from written excavation reports
S19-08	Alessandro Panetta, Paola Derudas	3D photogrammetric documentation in the archaeology of the contemporary past: Preserving the World War II landscape in North-West Sardinia (Italy)
S19-09	Forkel Johansen	Letter from the trenches: Challenges and strategies in the development of a digital collection management architecture
S19-10	Federico Nurra	A proposal for a collaborative Web Mapping for archaeological spatial data: OpenArcheoMap

S19-11	Rozenn Colleter, Guillaume Roy, Thierry Gaugry, Jean-Baptiste Barreau	HumanOS Project: A nomadic osteological inventory
S19-12	Arianna Commodari	Using GIS to study ancient landscapes. The case study of the Pisa centuriation (Italy)
S19-13	Ilan Ryan Smeyatsky, Karim Sadr, Patrick Randolph-Quinney	Discerning and explaining shape variations in Later Stone Age tanged arrowheads, South Africa
S19-14	Jean-Philippe Chimier, Matthieu Gaultier, Isabelle Pichon	Structuring data from documentary study and archives for spatial studies. Examples from funerary archeology
S19-P1	Alexis Gorgues, Florent Comte, Sonia Syllac	From the field to the showroom: The Augmented-Reality Kilns ExhibitOn (ARKEO)
S19-P2	Mar Zamora Merchán	Roman archaeology and GIS visibility studies
S19-P3	Raymond Sauvage, Magnar Mojarén Gran	Digital strategies and workflow. Case studies from large scale excavations in Central Norway
S19-P4	Wuyang Shui	Why 3D printing technique is the useful tool for artifact conservation

S20	Arianna Traviglia, Karsten Lambers	Computer vision vs human perception in remote sensing image analysis: Time to move on
S20-01	Dave Cowley	Why, when and how? Context and computer vision in archaeological prospection and interpretation
S20-02	Sebastian Zambanini, Fabian Hollaus, Robert Sablatnig	Computer vision applied to historical air photos: The registration and object detection challenge

S20-03	Øivind Due Trier, Arnt-Børre Salberg, Lars Holger Pilø	Semi-automatic detection of charcoal kilns from airborne laser scanning data
S20-04	Benjamin Stular	Two methods for semi-automated feature extraction from lidar-derived DEM designed for cairn-fields and burial mounds
S20-05	Iris Caroline Kramer	Using eCognition to improve feature recognition
S20-06	Amandine Robin, Karim Sadr	Automated detection of stone-walled ruins using based on support vector machine and histogram of oriented gradients
S20-07	Kenneth L Kvamme	Experiments in the automatic detection of archaeological features in remotely sensed data from Great Plains USA villages
S20-08	Till Frieder Sonnemann, William Megarry, Eduardo Herrera Malatesta, Douglas Comer	Down to the last pixel: Multiband use for direct detection of Caribbean indigenous archaeology

S21	Leif Isaksen, Keith May	Linked pasts: Connecting islands of content
S21-01	Karsten Tolle, David Wigg-Wolf, Ethan Gruber	An ontology for a numismatic island with bridges to others
S21-02	Carl Anders Olsson	A Linked (Open) Data hub at the Norwegian Directorate for Cultural Heritage: A case study
S21-03	Sebastian Cuy, Wolfgang Schmidle, Florian Thiery	Linking periods: Modeling and utilizing spatio-temporal concepts in the chronOntology project
S21-04	Keith May	The Matrix: Connecting time and space with archaeological research questions involving spatio-temporal phenomena and the conceptual relationships between them

S21-05	Koen Van Daele, Maarten Vermeyen, Sophie Mortier, Leen Meganck	When data meets the enterprise. How we turned a merger of organisations into a confluence of information
S21-06	Valeria Vitale, Jeffrey Becker, Jonathan Prag	Where is the House of the Dwarves? Enhancing granularity in the Pleiades Gazetteer: The examples of ancient Sicily and Pompeii
S21-07	Ethan Gruber	LOD for Numismatic LAM Integration
S21-08	Leif Isaksen, Simon Rainer, Pau de Soto Cañamares, Elton T E Barker	Pelagios Commons: Decentralizing the Web of historical data

S22 Karsten Lambers, Hans Kamermans Teaching archaeology in the digital age. UISPP official session

S22-01	Alexis Gorgues, Florent Comte	Dynamic process, static document. How to solve the teacher's baffling problem?
S22-02	Michael Remmy	ArGO. Archaeological Geocaching Online. Teaching and learning archaeology with geocaching
S22-03	Anne Moreau, Sylvain Badey	When I was a child, I wanted to be an archaeologist. What about now? A French case study
S22-04	Heleen Van Londen, Marjo Schlaman, Andrea Travaglia	Towards the integration of green and cultural heritage management. Developing content for blended learning
S22-05	Anna S Agbe-Davies	Archaeological education for a digital world: Case studies from the contemporary and historical US
S22-06	Alessandro Vecchione, Domenica Dininno, Giulio Casazza	Digital data recording at Circus Maximus: A recent experience

S22-P1	Mar Zamora Merchán, Javier Baena Preysler	Teaching GIS in archaeology: What Students focus on
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S23 Lars Gustavsen, Christer Tønning, Arne Anderson Stamnes, Erich Nau, Monica Kristiansen

Needles in the haystack: Geophysical methods in challenging conditions

S23-01	Christian Løchsen Rødsrud, Arne Anderson Stamnes, Kristin Eriksen	Magnetic geophysical prospection on prehistoric iron production sites in cultivated contexts: The case of Ånestad, Hedmark in Norway
S23-02	Christine Markussen, Katie Simon, Benjamin Porter, Stephanie Brown	Understanding contrast at Busayra: Geophysical surveys of an Iron Age settlement in Southwest Jordan
S23-03	Manuel Gabler	Opportunities and limitations of archaeological geophysical prospection on the example Uppåkra in Sweden
S23-04	Martina Seifert, Ewdoksia Papuci-Władyka, Tomasz Kalicki, Sebastian Adlung, Michaelis Antonakis, Nikola Babucic, Joanna Krupa, Artur Buszek, Sławomir Chwatek, Dawid Świąch, Tomasz Herbich, Łukasz Misk	Looking through the rocks. Geophysical research on the agora of the ancient city: Nea Paphos—A case study
S23-05	Petra Schneidhofer, Erich Nau, Christer Tønning, Immo Trinks	A geoarchaeological approach to selected issues in Norwegian archaeological geophysical prospection
S23-06	Tuna Kalayci, Apostolos Sarris	Picking needles from a magnet: Obstacles and (hidden) opportunities of magnetic prospection in challenging environments

S23-P1	Christine Markussen	Comparing 3D Ground Penetrating Radar visualization methods: A case study from Austria
S24	David Vogt, Steinar Kristensen, Magne Samdal, Bjarte Aarseth	Digital rock art documentations, new perceptions
S24-01	Xosefina Otero	New eyes to old graphics. Rock art in the Emirate of Sharjah
S24-02	Tatiana Votroubeková	Documenting facades of Etruscan rock-cut tombs: From 3D recording to archaeological analysis
S24-03	Raymond Sauvage	Ex-situ preservation of exposed painted rock art. Applying photogrammetry and color manipulation
S24-04	Erik Kjellman	Photogrammetric rock art detection: Assisting detection of rock art on lichen covered surfaces using photogrammetry and 3D modelling software
S24-P1	Xosefina Otero	New eyes to old graphics. Rock art in the Emirate of Sharjah

S25	Ingvild Solberg Andreassen	Public archaeology and the use of digital platforms
S25-01	Gareth Beale, Nicole Beale	Co-designing digital community archaeologies: Experiences from the re-reading the British Memorial Project
S25-02	Kate Welham, Lawrence Shaw, Mark Dover, Harry Manley, Mike Parker Pearson	Using Google Earth applications to enhance public engagement with cultural heritage: An evaluation of Seeing Beneath Stonehenge
S25-03	Matthew Luke Vincent, Chance Coughenour, Fabio Remondino, Mariano Flores Gutierrez, Victor Manuel Lopez-Menchero Bendicho, Dieter Fritsch	Rekrei: A public platform for digitally preserving lost heritage

S25-04	Meriem Zammel	Photomodelling and webmapping on archeological site of Carthage (Tunisia) and data collection in the museum of Bardo (Tunisia)
S25-05	Gunnar Liestøl, Birgitte Bjørkli, Espen Uleberg	Visualizing original sea level of Stone Age sites on location by means of mobile augmented reality
S25-06	Alex da Silva Martire, Tatiana Bina	DOMUS: Cyber-archeology and education
S25-07	Leif Harald Fredheim	Democratising the digital: Sustaining community-sourcing platforms for heritage management and conservation by co-creation
S25-08	Michael Ann Bevivino	Breaking the mould: Why do we replicate objects of the past?
S25-P1	Evy Berg	WW2 remains as cultural heritage
S25-P2	Lauren Massari	Archives, archaeology, and architecture: A multimedia approach for 3D reconstructions
S25-P3	Michal Michalski, Robert Carter, Daniel Eddisford, Richard Fletcher, Colleen Morgan	Doha Online Historical Atlas—GIS interactive mapping of space and time in a pearling town

S26	Kate Welham, Paul Cheetham, Derek Pitman, Rebecca Cannell	The portable XRF revolution: Elemental analysis for all?
S26-01	Kate Welham, Derek Pitman, Chloe Duckworth, David Govantes-Edwards, Yvette Barbier, Ricardo Cordoba de Llave	Seeing things differently. The use of combined geochemical and geophysical prospection techniques to investigate early Islamic town planning

S26-02	Derek Pitman, Mark Brisbane, Paul Cheetham, Miles Russell, John Beavis, Rob Symmons, Stephen Clews, Susan Fox, Maurice Tucker	Pipes, pedalis and portable X-ray fluorescence: New avenues for the study of Roman building materials
S26-P1	Luisa Dallai, Vanessa Volpi, Alessandro Donati	A multidisciplinary project for the study of historical landscapes: New archaeological and physicochemical data from the "Colline Metallifere" district

S27	Mieko Matsumoto, Michael Märker, Espen Uleberg, Volker Hochschild	Revealing by visualising: Geographic relations in cultural heritage databases
S27-01	Christian Willmes, Daniel Becker, Michael Märker, Volker Hochschild, G. Bareth	GIS-based data integration for mapping paleoenvironments
S27-02	Richard Jennings	Endangered archaeology in the Middle East and North Africa: The development of a spatial database
S27-03	Michael Märker, Volker Hochschild	Management of raster data and their dynamic visualization within the ROCEEH-ROAD System
S27-04	Mieko Matsumoto, Espen Uleberg	Vertical aspects of Stone Age distribution in Norwegian high mountains
S27-P1	Peter Oskar Pflaumer	Distributions of Age at death from Roman Epitaph inscriptions in North Africa: An application of data mining

* S28	Iza Romanowska, Joan Anton Barceló, Florencia del Castillo	Methodology of archaeological simulation. Meeting of the Special Interest Group in Complex Systems Simulation
S28-01	Juan Barceló	Why model
S28-02	Stefani Crabtree	What is complexity theory and why should we care about it
S28-03	Ben Davies	Simulation as middlerange research
S28-04	Colin Wren	Models: 'Small and elegant' or 'complicated but realistic'?
S28-05	Elizabeth Gallagher	ABMs, because they're worth it? Alternatives to our favourite method
S28-06	Tom Brughmans	Fancy doing some networks?
S28-07	Philip Verhagen	Building on expert advice to create an informed model
S28-08	Iza Romanowska	Lessons already learned: drawing from the best software practice
S28-09	Irmela Herzog	Proof of concept verifying ABM with analytical methods
S28-10	Florencia del Castillo	Validation: The painful moment when the model meets the data
S28-11	Xavi Rubio-Campillo	Model selection: what is the 'best' model?

*Roundtable

① (New title) The Emergence and Formation Process of the La Tène Culture Settlement System in Upper Silesia (Southern Poland and Northern Czech) in Light of the Simulation Modelling