

## PROGRAM

### Monday 11<sup>th</sup> of November 2019

18:30-21:30	Welcoming reception at Cyprus American Archaeological Research Institute (CAARI) Pre-registration
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### Tuesday 12<sup>th</sup> of November 2019

08:30-09:00	Registration (NTL Building)	
09:00-09:20	Opening ceremony (NTL Building)	Prof. Thilo Rehren, STARC Dr Lindy Crewe, CAARI Prof. Lina Kassianidou, ARU Dr Marina Solomidou-Ieronymidou, DoA

### Session I Frontiers in Digital Archaeology (NTL building)

*Chairs: Prof. F. Niccolucci, Dr S. Hermon*

09:20-09:50	<b>Keynote lecture:</b> <i>Challenges in Digital Archaeology</i>	Prof Franco Niccolucci
09:50-10:10	<b>FDA1:</b> A LIVING SHIPWRECK: A composite study of scrambling devices: three-dimensional modelling and biological analysis for the understanding of site formation processes in archaeological shipwreck sites	M. Secci, S. Demesticha, C. Jimenez, I. Katsouri, B. Stivarou
10:10-10:30	<b>FDA2:</b> From excavation to the drawing and from drawing to the model. The digital reconstruction of twenty years excavations in the archeological site of Bedriacum	S. Parrinello, F. Galasso
10:30-10:50	<b>FDA3:</b> The identification of cities in archaeology: A case study from central Israel, the seventh-eleventh centuries AD	H. Nol
10:50-11:10	<b>FDA4:</b> Knowledge-based generative adversarial networks for scene understanding in cultural heritage	R. Garozzo, C. Pino, C. Santagati, C. Spampinato, G. Vecchio
11:10-11:30	Coffee break	
11:30-11:50	<b>FDA5:</b> Digital reconstruction and visualization of a New Kingdom palace area from the eastern Nile Delta/Egypt	I. Hein, S. Müller

11:50-12:10	<b>FDA6:</b> HBIM Approach for the knowledge and documentation of the St. John the Theologian Cathedral in Nicosia (Cyprus)	N. Bakirtzis, S. Hermon, C. Laurini, D. Papacharalambous, G. Sanfilippo, C. Santagati
12:10-12:30	<b>FDA7:</b> 3D Geometric descriptors for the study of Cypriot coroplastic production	V. Vassallo, A. Scalas, M. Mortara M., S. Hermon
12:30-14:00	Lunch break	<b>POSTER SESSION I</b>
14:00-14:20	<b>FDA8:</b> SimpleX: Towards an Ontology for Archaeological Pottery	Ch. Paraskeva
14:20-14:40	<b>FDA9:</b> Towards a Phygital Heritage approach for Museum Collection	M. Lo Turco, P. Piumatti, M. Calvano, E. C. Giovannini, N. Mafrici
14:40-15:00	<b>FDA10:</b> Machine Learning approach for monitoring and managing museum collections	F.M. La Russa, C. Santagati
15:00-15:20	Coffee break	

## Session II Art Characterization (NTL Building)

Chairs: Dr M. Menu, Dr N. Bakirtzis

15:20-15:50	<b>Keynote lecture:</b> <i>Heritage Science a discipline for the conservation and analysis of works of art.</i>	Dr Michel Menu
15:50-16:10	<b>Art1:</b> Laser applications for the characterization of cultural heritage	V. Detalle, X. Bai, M. Lopez, C. Koch Dandolo, M. Menu
16:10-16:30	<b>Art2:</b> Giovanni Baronzio's 'Crucifixion': Analytical Approaches and Art Historical Considerations	S. Gasanova, N. Bakirtzis D. Levif-Martos
16:30-16:50	<b>Art3:</b> The Application of Portable XRF on Negev Rock Art: Chronological Trends at the Ramat Matred Petroglyphs as a Test Case	I. Shapira, D. Eisenberg-Degen, L. Schwimer, Y. Goren
16:50-17:10	<b>Art4:</b> Mapping the mineralogical composition of pigments using multispectral imaging in the frigidarium of the Sarno Baths, Pompeii	Y. Asscher, I. Angelini, M. Secco, M. Parisatto, A. Chaban, R. Deiana, G. Artioli
17:10-17:30	<b>Art5:</b> Documentation of paintings restoration through photogrammetry and change detection algorithms	D. Abate

## Session III Synchrotrons in Archaeology and CH-SESAME (GOB Building) (parallel session)

Chairs: Dr G. Paolucci, Dr K.O. Lorentz

14:00-14:30	<b>Keynote lecture:</b> <i>Cultural Heritage and Archaeological Research at SESAME Synchrotron</i>	Dr Giorgio Paolucci
14:30-14:50	<b>SSE1:</b> Synchrotron radiation enabled human bioarchaeology in the EMME region: SR-XRF, XANES and EXAFS data in exploring key archaeological questions	K. Lorentz

14:50-15:10	<b>SSE2:</b> SR-FTIR in Archaeological and Cultural Heritage Research at SESAME	G. Kamel
15:10-15:30	<b>SSE3:</b> Advantages and potential of SR phase contrast microCT enabled virtual dental histology in comparison with conventional dental histology	S. Lemmers, K. Lorentz
15:30-15:50	<b>SSE4:</b> Highlights of potential Synchrotron research applications at the University of Jordan: case studies from Cultural Heritage	B.M.Y. Gharaibeh, M. Arimat
15:50-16:10	Coffee break	
16:10-16:30	<b>SSE5:</b> STARCH: at the origins of starch food diet. SR-FTIR and SEM applied to Palaeolithic Grinding Stones from the Pontic area	G. Biranda, L. Vaccari, N. Cefarin, C. Cagnato, I. Pantushina, N. Skakun, C. Lubritto, G. Sorrentino, L. Longo
16:30-16:50	<b>SSE6:</b> SR-FTIR analyses of ancient hair remains from Anatolia	A. Buyukkarakaya, G. Kamel, S. Lemmers, K. Lorentz
16:50-17:10	<b>SSE7:</b> Comparison of synchrotron CT and laboratory based micro-CT with applications in heritage materials	K. Jakata
17:10-17:30	<b>SSE8:</b> SR microCT in identification of NNL: Distinguishing between stillborn and newborn infants	Y. Miyauchi, S. Lemmers, K. Lorentz

17:30-18:00	Refreshments (NTL Building)
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18:00-19:00	<b>Public Keynote lecture:</b> <i>Time, History and Climate in Cyprus: the Cyprus Dendrochronology Laboratory and recent progress</i> (NTL Building)	Prof. Sturt Manning
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Wednesday 13<sup>th</sup> of November 2019

08:30-09:00	Registration (NTL Building)
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## Session IV Human Osteoarchaeology (NTL Building)

Chairs: Prof. A. Soltysiak, Dr E. Nikita

09:00-09:30	<b>Keynote lecture:</b> <i>Textual sources: A headache and a godsend for Mediterranean and Oriental bioarchaeologists</i>	Prof. Arkadiusz Soltysiak
09:30-09:50	<b>Hum1:</b> Eastern Mediterranean isotopic research within the IsoMemo initiative	R. Fernandes
09:50-10:10	<b>Hum2:</b> Changes to the human diet at Knossos under the Roman Empire and Christianity using stable isotope analysis	A. Moles, H. Reade, A.-L. Jourdan, R. Stevens
10:10-10:30	<b>Hum3:</b> Isotopic reconstruction of the lifeways of ancient Athenians	R. Fernandes, A. Lagia
10:30-10:50	<b>Hum4:</b> Malaria in the Eastern Mediterranean: Preservation, Curation, and Biomolecular Promises	M. Gamble, F. Maixner, A. Loufouma-Mbouaka, A. Zink, M. Binder
10:50-11:10	Coffee break	
11:10-11:30	<b>Hum5:</b> Human remains under the microscope of funerary taphonomy. Investigating the histological biography of the decaying body in the prehistoric Aegean	N. Papakonstantinou, Th. Booth, S. Triantaphyllou
11:30-11:50	<b>Hum6:</b> East of Rome: reexamining impacts of Roman imperialism on Eastern Mediterranean populations through an osteoarchaeological perspective	K.E. Marklein
11:50-12:10	<b>Hum7:</b> Bioarchaeological approaches to human mobility in the EMME and beyond: the People in Motion project in context	E. Nikita
12:10-12:30	<b>Hum8:</b> Inter-personal violence in the Iron Age cemetery at Qareh Tepe, Iran	J. Trębicka
12:30-14:00	Lunch break	<b>POSTER SESSION II</b>

## Session V Crops, Food Choices, and Landscapes (NTL Building)

Chairs: Prof. M. Jones, Dr E. Margaritis

14:00-14:30	<b>Keynote lecture:</b> <i>Mobility and selection: some reflections upon domestication</i>	Prof. Martin Jones
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14:30-14:50	<b>CFL1:</b> Human diet and landscape as attested by the plant remains of PPNC Atlit-Yam, Carmel Coast, Israel	A. Hartmann-Shenkman, M.E. Kislev, E. Galili, E. Weiss
14:50-15:10	<b>CFL2:</b> Food or fuel? A micro-botanical perspective of plant remains from Neolithic Abu Hureyra, N. Syria	K. Dudgeon
15:10-15:30	<b>CFL3:</b> Between the Desert and the Sown Revisited: crops, food choices and landscapes of the Levant	C. Palmer
15:30-15:50	<b>CFL4:</b> Crop Choice and Socio-Economic Organisation in Bronze Age Western Anatolia	T. Maltas
15:50-16:10	<b>CFL5:</b> Early Bronze Age communities of Western Anatolia: with a special contribution on archaeobotanical research	Ö. Çizer
16:10-16:30	Coffee break	
16:30-16:50	<b>CFL6:</b> The trade distances across the southern Levant during the Early Bronze Age - the botanical evidence	S. Frumin, Y. Melamed, E. Weiss
16:50-17:10	<b>CFL7:</b> Landscapes of production and the nature of urban farming at Tell Brak	Ch. Diffey, M. Charles, A. Bogaard
17:10-17:30	<b>CFL8:</b> Arboriculture and urbanism in the Bronze Age Aegean	E. Margaritis
17:30-17:50	<b>CFL9:</b> Exploring the human-cattle relationship in Bronze Age Cyprus: Archaeozoological, isotopic and ethnographic approaches	A. Spyrou
17:50-18:10	<b>CFL10:</b> The road to the Bronze Age: a diachronic approach to sheep and goat husbandry in prehistoric Cyprus	A. Hadjikoumis
18:10-18:30	<b>CFL11:</b> Isotopic Data ( $\delta^{18}\text{O}$ , $\delta^{13}\text{C}$ ) as a Means of Investigating Early Complex Societies: The Case of Animal Management in the Jordan Valley	L. Welton
18:30-18:50	<b>CFL12:</b> A multi-isotope base map for Jordan: a tool for re-examining movement and community in the past	L. Johnson, Kh. el-Bashaireh, A. Al-Shorman, J. Montgomery, G. Philip
20:30-	<b>Official dinner of ICAS-EMME</b>	

Thursday 14<sup>th</sup> of November 2019

08:30-09:00	Registration (NTL Building)
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## Session VI Computation in Archaeology (NTL Building)

*Chairs: Prof. E. Paliou, Dr G. Artopoulos*

09:00-09:30	<b>Keynote lecture:</b> <i>TBC</i>	Prof. Eleni Paliou
09:30-09:50	<b>CA1:</b> ANNFASS: A Neural Network Framework for understanding historical monuments Architectural Structure and Style	M. Igarievna Maslioukova, M. Averkiou, M. Deligiorgi, G. Artopoulos, E. Kalogerakis, G. Patow, Y. Chrysanthou
09:50-10:10	<b>CA2:</b> From Analogue to Digital: 40 years of archaeological documentation and management at the Neolithic UNESCO World Heritage site of Khirokitia	D. Abate, M. Faka, C. Ioannou, N. Bakirtzis, S. Hermon, O.D. Le Brun
10:10-10:30	<b>CA3:</b> Khirokitia: simulating a proto-urban site	G. Artopoulos, I. Romanowska, O.D. Le Brun
10:30-10:50	<b>CA4:</b> When culture meets economy: modelling cultural complexity in an economic setting	I. Romanowska, T. Brughmans, S. Carrignon, A. Lichtenberger, R. Raja
10:50-11:10	Coffee break	

11:10-11:40	<b>Public Keynote lecture:</b> <i>Archaeological materials studies and modern innovation: examples from the study of ceramics and mortars</i>	Dr Vasilis Kilikoglou
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## Session VII Archaeological Materials (NTL Building)

*Chairs: Prof. Kh. Al-Bashaireh, Prof. Th. Rehren*

11:40-12:10	<b>Keynote lecture:</b> <i>Ancient marble trade and its provenance determination</i>	Prof. Khaled Al-Bashaireh
12:10-12:30	<b>AM1:</b> A Technological Approach to Iron Age Pottery from the Zagros Region: A Case Study from the Dinka Complex (Iraqi Kurdistan)	S. Amicone, J.-J. Herr
12:30-14:00	Lunch break	<b>POSTER SESSION III</b>
14:00-14:20	<b>AM2:</b> Raw material procurement at Boila Rockshelter, northwestern Greece, as an indicator of hunter-gatherer mobility in Greece during the Late Upper Palaeolithic and Mesolithic	P. Elefanti, G. Marshall, Ch. Stergiou, E. Kotjabopoulou

14:20-14:40	<b>AM3:</b> The contribution of soil micromorphology for understanding the occupation styles in prehistory: Two case-studies from Cyprus and Crete	P. Mylona, M. Pomadère, J.-D. Vigne
14:40-15:00	<b>AM4:</b> Abandonment processes through the microscope lens. Microarchaeological data from Middle Bronze Age Erimi, Cyprus	M. Amadio, L. Bombarideri
15:00-15:20	<b>AM5:</b> Metallic and glazed artefacts from the Cypriot Chalcolithic	V. Kassianidou, A. Charalambous
15:20-15:40	<b>AM6:</b> Preliminary evidences for a Chalcolithic copper workshop in Fasaal, Northern Jordan Valley	Th. Rose, D. Rosenberg, S. Bar, Y. Goren
15:40-16:00	<b>AM7:</b> From desert ores to Middle Kingdom copper: first chemical and lead isotope data from the AHM collection, Belgium	F.W. Rademakers, G. Verly, L. Delvaux, P. Degryse
16:00-16:20	Coffee break	
16:20-16:40	<b>AM8:</b> Using pXRF spectroscopy to identify ancient copper alloys: the case of LBA Enkomi (Cyprus)	A. Charalambous, V. Kassianidou, G. Papasavvas
16:40-17:00	<b>AM9:</b> "Cooking up" pottery recipes: a diachronic technological and provenance analysis of cooking ware ceramics from prehistoric Heraion on Samos, Greece (5th to early 2nd millennia BC)	S. Menelaou, O. Kouka
17:00-17:20	<b>AM10:</b> Technology of early Byzantine glass from the glass workshop of Argyroupoli, Rethymno, Crete: Preliminary results using SEM-EDS	A. Oikonomou, A. Fiolitaki
17:20-17:40	<b>AM11:</b> Glass from the Sea: Composition of Raw Glass off the Coast of Israel	Y. Gorin-Rosen, I.C. Freestone, E. Galili
17:40-18:00	<b>AM12:</b> Indigeneity and innovation of early Islamic glaze technology	C. Ting, I. Taxel
18:00-18:20	<b>AM13:</b> Persian Crucible Steel: Archaeology, Manuscripts and Experiments	R. Alipour, Th. Rehren

## Friday 16<sup>th</sup> of November 2019

10:00-13:00	<b>Visit at the Archaeological Museum of Nicosia (<i>details tbc</i>)</b>
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## LIST OF POSTERS

### Poster Session I (Tuesday 12<sup>th</sup> of November, NTL Building)

#### Synchrotrons in Archaeology and CH-SESAME

SSE-P1	Exploring paleopathology of Hellenistic/Roman Paphos (Cyprus): Potential of high-resolution SR microCT at SESAME	G. Ioannou, S. Lemmers, K. Lorentz
SSE-P2	Charlie 'unwrapped': a scientific investigation of a Mummified Votive offering in the Australian Institute of Archaeology collection	C.A. Raymond, J.J. Bevitt, C.J. Davey
SSE-P3	Hidden Text: Imaging and Reading an Ancient Tablet encased in an Envelope	L.R. Siddall, C.A. Raymond, J.J. Bevitt, C.J. Davey

### Poster Session II (Wednesday 13<sup>th</sup> of November, NTL Building)

#### Human Osteoarchaeology

Hum-P1	Skeletal evidence of trepanation from ancient Akanthos, Greece	A. Aidonis, Ch. Papageorgopoulou
Hum-P2	Human remains from Bronze and Iron Age sites in Armenia: palaeobiological and paleopathological studies and a new approach to age estimation through the use of Cameriere's dental radiographic method	F. Bertoldi, R. Mkrtchyan, A. Piliposyan, H. Simonyan, R. Cameriere
Hum-P3	The results of the complex study of bone materials obtained in the yard of the Monastery of the Theotokos and the crypt of the Church of Saint Nicholas in Gialia	L. Bitadze, S. Laliashvili, D. Mindorashvili, I. Gagoshidze
Hum-P4	Breastfeeding and weaning patterns in ancient Thessaloniki	E. Ganiatsou, E. Vika, Ch. Papageorgopoulou
Hum-P5	Stature estimation in ancient Greek population of Roman times	M. Koukli, F. Siegmund, Ch. Papageorgopoulou
Hum-P6	Burials and human osteological remains from the Bronze Age acropolis of Aghios Ioannis in Boeotia, Greece: preliminary results of the bioarchaeological analysis	E. Kountouri, P. Tritsaroli, Th. Konstantakou
Hum-P7	Social Mobility and Life Quality in Roman Byblos: Comparative Analysis of Cross-Sectional Geometry, Degenerative Joint Disease, Enteseal Changes, Cemetery Clustering, and Tomb Typology	M. Mardini, E. Nikita, G. Doumit, T. Zaven, M. Ghadban
Hum-P8	Evidence of kinship and membership in the Bronze Age collective burials from the Caucasian cemetery of Doghlauri (Shida Kartli region, Georgia)	P.A. Rasia, L. Bitadze, E. Rova, F. Bertoldi
Hum-P9	Investigating oral pathologies and their implications at the Imperial Roman Province of Upper Macedonia	Ch. Vergidou, G. Karamitrou-Mentesidi, S. Voutsaki, E. Nikita



Hum-P10	The assessment of bone deterioration with nuclear magnetic resonance spectroscopy in a multidisciplinary context: The case of the UNESCO world heritage site of Sedlec, Czechia	A. Viani, P. Mácová, D. Machová, T. Čendak
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## Crops, Food Choices, and Landscapes

CFL-P1	A 3D Tool for Identification of Grapevine Varieties – Sample Preparation, Scanning and Analysis	M. David, E. Drori, A. Karasik, E. Weiss
CFL-P2	Scientific geo-ethnoarchaeology and its archaeological application to investigate farming, settlements and agriculture in the past	S. Elliott
CFL-P3	Crops and food choices at the Late Bronze Age site of Hala Sultan Tekke	D. Kofel, T. Bürge, P.M. Fischer
CFL-P4	The archaeobotany of Pre-Pottery Neolithic Cyprus: a synthesis of current and recent data	M. Rousou, M. Tengberg, O. Kouka
CFL-P5	Marine vertebrate exploitation in the eastern Mediterranean c. 2500 BC - 1300 AD	R. Winter, W. de Kock, C. Çakırlar

## Poster Session III (Thursday 14<sup>th</sup> of November, NTL Building)

### Archaeological Materials

AM-P1	Investigating the architectural history of the 14th century AD Al-Attar mosque, Tripoli- Lebanon	R. Baydoun, Z. El Morr, C. Hachem, G. Homsy-Gottwalles
AM-P2	Ancient artisans and ethno-archaeology. From Early Iron Age Naxos and Andros to modern Cyprus: first assessment and perspectives	X. Charalambidou, B. McLoughlin, G. London
AM-P3	Scientific Investigation of Roman-Byzantine Glass Working Remains from 'Aqir, Israel	C. Chen, I. Freestone, Y. Gorin-Rosen
AM-P4	Egyptian Middle Kingdom Copper: Analysis of a Crucible from Buhen	C.J. Davey, B. Santarelli, Th. Rehren
AM-P5	Technology and Provenance of Stamped Documents on Clay: study of Iron Age bullae from Jerusalem	C. Fossé, E. Arie, Y. Goren
AM-P6	"Moving" cooking pots in LBA Chania, Crete: local production and imports	S. Fouriki, E. Kiriati, M. Vlazaki, B. Hallager
AM-P7	Revisiting the question of ceramic provenance in the Northern and North-eastern Peloponnese	C. Gardner, E. Kiriati, N.S. Müller, G. Giannakopoulos, K. Tsirts, K. Kissas, S. Müth-Frederiksen, Ch. Hayward, N.M. Kristensen
AM-P8	Bringing life to old MUSEum COllections: The interdisciplinary study of pottery from the Cypriot Iron Age polities of Salamis, Soloi, Lapithos and Chytroi (MuseCo)	A. Georgiadou, M. Dikomitou-Eliadou, G. Papasavvas, P. Waiman-Barak, D. Pilides

AM-P9	Archaeometallurgical analyses of metal finds from the Akko Tower shipwreck	N. Iddan, M. Cohen, D. Ashkenazi, D. Cvikel
AM-P10	Mapping Archaeoseismic Damages across Jordan (MADAJ)	R. Jaradat, Kh. al-Bashaireh, Ad. al-Rawabdeh, A. Gharaibeh, B. Khrisat
AM-P11	Neolithic plaster floors at Motza, Israel: Use of dolomite in ancient plaster	Y. Maor, H. Khalaily, J. Vardi, Y. Asscher
AM-P12	Characterization of Historical Materials from Rammed Earth Heritage of Iran	M.Z. Moghaddam
AM-P13	Maritime trade in Early Islamic-period glass: New evidence from the Ma'agan Mikhael B shipwreck	E. Natan, Y. Gorin-Rosen, D. Cvikel
AM-P14	Iron Production Technology in the Neo-Assyrian Sphere: The Iron Workshop at Tel Sera', Western Negev, Israel	Y. Pagelson, E.D. Oren, Y. Golan, Y. Goren
AM-P15	Applied Potmarks from Bronze Age Contexts in Lebanon	M. Peršin
AM-P16	State-of-the-Art TEM coupled with Electron Diffraction for the Study of Silicate Archaeological Materials	N. Zacharias, S. Nikolopoulos, E. Palamara, P.P. Das
AM-P17	Technology of slips and glazes in the post-medieval Balkans: the case of Belgrade in the 16th and 17th centuries	J. Živković