

Location: **WAPPENSAAL**

09:00-09:30	<b>Opening</b> Ruth PRÖCKL, Bundesministerium für Kunst, Kultur, öffentlicher Dienst und Sport Ulrike HERBIG, Technische Universität Wien   CHNT-ICOMOS Austria Wolfgang BÖRNER, Museen der Stadt Wien-Stadtarchäologie   CHNT-ICOMOS Austria
09:30-10:00	Keynote 1 <b>Would Digital Technologies allow the Conservation of the Outstanding Universal Value (OUV) of World Heritage Properties in a post-pandemic time</b> Mario SANTANA QUINTERO, CAN
10:00-10:20	<b>COFFEE BREAK</b>
<b>World Heritage Management and New Technologies</b> Chairs: Ulrike HERBIG, AUT   Bernd PAULOWITZ, GER	
10:20-10:40	<b>Venice of the North? Ten Years of World Heritage in the Amsterdam Canal District: An Exploration of Effects</b> Jaap Evert ABRAHAMSE   Erik SCHMITZ, NED
10:40-11:00	<b>A sustainable future for world heritage? The need for more integrated approaches in heritage management</b> Rowin VAN LANEN   Menne KOSIAN   Roy VAN BEEK, NED
11:00-11:20	<b>Structured light scanning as a monitoring method to investigate dimensional changes due to climatic changes on cultural heritage</b> Kristina HOLL   Leander PALLAS   Paul BELLENDORF, GER
11:20-11:40	<b>A combination of 3D data to reconstruct the archaeological features: 3D models of the burials of the necropolis of Piovego (PD, Italy)</b> Francesca ADESSO   Emanuela FARESIN   Giuseppe SALEMI, ITA
11:40-12:00	<b>The submerged archaeological sites of the Mosul Dam Reservoir Evaluating emergence patterns with a new cost-efficient tool</b> Paola SCONZO   Francesca SIMI   Andrea TITOLO, GER
12:00-12:20	<b>Virtual reconstruction and 3D modeling for the auralization of acoustic Heritage: the case study of the Teatro del Maggio in Florence</b> Stefano BERTOCCI   Federico CIOLI   Andrea LUMINI, ITA
12:20-12:40	<b>ISTER – Roman Roads and Roman Heritage in the Danube Region</b> Manfred SCHRENK, AUT
12:40-14:00	<b>LUNCH BREAK</b>
14:00-14:20	<b>Challenges and opportunities for virtual archaeological data stewardship</b> Holly WRIGHT   Karie GREEN, UK
14:20-14:40	<b>Architectural Design Solutions in the Historical Residential Context Adjacent to the Cultural Landscape of Bamiyan Buddha Statues</b> Tayebeh NAZARIAN   Asadullah MOVAHEDI, AFG
14:40-15:00	<b>Participatory Monitoring in Cultural Heritage Conservation Case Study: The Landscape Zone of the Bisotun World Heritage Site</b> Ahmad NASROLAHI   Cristina GENA   Vito MESSINA   Samet EJAREI, ITA
15:00-15:20	<b>COFFEE BREAK</b>
15:20-16:00	Sponsored Keynote <b>Virtual Tourism: From Version 1.0 to 2.0</b> Bernhard FRISCHER, Founder and President, Flyover Zone, USA
<b>Computational methods for exploring visual aspects of cultural heritage sites</b> Chairs: Irmela HERZOG   Eleftheria PALIOU, GER	
16:00-16:20	<b>Views on ancient lighting: Modelling lighting devices and their effects in architecture</b> Lars Oliver GROBE, SUI   Andreas NOBACK   Ruth BIELFELDT   Vera HENKELMANN   Franziska LANG, GER
16:20-16:40	<b>Assessing Spectator Positions. A Case Study from Cochasquí, Ecuador</b> Irmela HERZOG, GER   Alden YÉPEZ, ECU
16:40-17:00	<b>On common ground: what do Cultural Heritage Management, Landscape Archaeology and Archaeoastronomy have in common?</b> Gail HIGGINBOTTOM, Spain   Vincent MOM, NED
17:00-17:20	<b>Shadows analysis and viewshed georeferencing for dating of historical photographs. New possibilities for chronology studies of lost built heritage</b> Antonio SUAZO, CHI
17:20-17:40	<b>Discussion</b>
<b>Opening Event</b>	
18:00-22:00	<b>Evening Event</b>

Location: **TOP 319**

09:00-09:30		X
09:30-10:00		X
10:00-10:20	<b>COFFEE BREAK</b>	
<b>Cultural Heritage and the Semantic Web: Capture of Rich Semantic Data</b> Chairs: Piotr KUROCZYŃSKI, GER   Stephen STEAD, UK		
10:20-10:40	<b>Metadata scheme for 3D models How to capture the source-based 3D reconstruction of Cultural Heritage?</b> Igor BAJENA   Piotr KUROCZYŃSKI, GER	
10:40-11:00	<b>Standard Dehio – On the Way from a Printed Handbook to a Knowledge Infrastructure on Art and Architectural Object</b> Sławomir BRZEZICKI, GER	
11:00-11:20	<b>Documenting and disseminating a Florentine church in 3D: Critical Reflections on a Case Study</b> Donal COOPER   Fabrizio NEVOLA, UK	
11:20-11:40	<b>Semantic topologies for complex medieval buildings and their annotation</b> Leonhard SALZER   Tobias ARERA-RÜTENIK   Alexander STENZER, GER	
11:40-12:00	<b>Photogrammetric 3D digitisation of models from an architectural collection</b> Andreas NOBACK, GER	
12:00-12:20	<b>Discussion</b>	
12:20-14:00	<b>LUNCH BREAK</b>	
<b>Cultural Heritage and the Semantic Web: Exploitation of Rich Semantic Data</b> Chair: Lorenzo CECCON, ITA		
14:00-14:20	<b>Digital Patrology: a theory and critical Database approach in Digital Libraries for converting historical scripts into texts and sources of modern perception</b> Nikolaos MYRIDIS, GRE	
14:20-14:40	<b>e-Pedalion: The transformation of a Christian cultural heritage text into a textual database of Orthodox Canon Law</b> Dimitra SARAKATSIANOU   Georgia KOLONIARI, GRE	
14:40-15:00	<b>FederationExpert System &amp; Thesaurus of Concepts and Terms «Byzantine Law and Acts»</b> Yury VIN   Dmitry Kondratiev KONDRATIEV, RUS	
15:00-15:20	<b>COFFEE BREAK</b>	
15:20-16:00		X
<b>Seeing in the dark - reconnaissance and evaluation technologies for world heritage sites and major infrastructure developments</b> Chairs: Jay CARVER, UK   Ann DEGRAEVE, BEL		
16:00-16:20	<b>Illuminating the darkness: Using geochemical survey in archaeological reconnaissance and evaluation for major infrastructure developments</b> Roger DOONAN   Clive WADDINGTON   Jay CARVER, UK	
16:20-16:40	<b>Light at the End of the Tunnel – The Application of Real-World and Digital Approaches on the A303 Amesbury to Berwick Down (Stonehenge) Scheme</b> Neil MACNAB   Leonora O'BRIEN, UK	
16:40-17:00	<b>Flying High! Combining Old with New Methods for Enhanced Airborne Prospection and Characterisation</b> Joel GOODCHILD, UK	
17:00-17:20	<b>Advances in archaeological prospection: the geoarchaeological shift</b> Clive WADDINGTON, UK	
17:20-17:40	<b>Discussion</b>	

# SCHEDULE I Wednesday, 3 November 2021

Location: **WAPPENSAAL**

Location: **TOP 319**

09:00-09:30	Keynote 2 <b>Digital Cities, NeuroArchaeology and Cyberarchaeology</b> Maurizio FORTE, USA
09:30-10:00	COFFEE BREAK
Empowering heritage sites through knowledge. How to use the data to improve the management and the visitors' experience Chair: Cristina MOSCONI, UK	
10:00-10:20	<b>Collecting activity in ancient Greece: from prehistoric times to the hellenistic era</b> Eirini TSAKIRI, GRE
10:20-10:40	<b>Historical roof structures – How to make the forgotten masterpieces visible? – The roof cadastre of Vienna's City Centre</b> Hanna A. LIEBICH   Eleonora DE MASI, AUT
10:40-11:00	<b>Virtual Reality Application Keltenwelt am Glauberg – New approaches in VR for archaeological sites</b> Marc GRELLERT   Axel POSLUSCHNY   Ruth BEUSING, GER
11:00-11:20	<b>Public works heritage: the G-O-ING pilot project</b> Rita RUIZ   P. HERNÁNDEZ-LAMAS   B. CABAU, ESP
11:20-11:40	<b>Collaborative heritage. Validated, shared knowledge creation on cultural heritage</b> Lorenza STANZIANO   Beatriz GARCÍA VIDAL   Mónica LUENGO AÑÓN   Héctor M. ALIAGA DE MIGUEL   Clara VILLALBA MONTANER, ESP
11:40-12:00	Discussion
12:00-14:00	LUNCH BREAK
In the air, under water, and ashore Chairs: Marco BLOCK-BERLITZ   Hendrik ROHLAND, GER	
14:00-14:20	<b>Roman Stone Monuments from North Dobruja, Romania: Case study the Halmyris fortification</b> Cristina-Georgeta ALEXANDRESCU, ROU
14:20-14:40	<b>3D modelling of the castle Neu-Wildon</b> Peter BAUER, AUT
14:40-15:00	<b>Photorealistic 3D-Roof and Façade Mapping of St. Stephen's Cathedral</b> Peter DORNINGER   Nikolaus STUDNICKA, AUT
15:00-15:20	<b>Virtual 3D State Models of the West Pediment of the Temple of Zeus at Olympia</b> Zackary HEGARTY, USA   Andras PATYAY-HORVATH, HUN
15:20-15:40	COFFEE BREAK
15:40-16:00	<b>Rapid and Reproducible Reconstruction of Ancient Architecture by Procedural Generation.Reconstruting the "Pavilion of the Rise of the Yuan Dynasty" in Karakorum, Mongolia</b> Dominik KLENK   Hendrik ROHLAND   Marco BLOCK-BERLITZ   Christina FRANKEN, GER
16:00-16:20	<b>The Visualisation of Construction Principles of Antic Architecture</b> Dominik LENGYEL   Catherine TOULOUSE, GER
16:20-16:40	<b>Archaeological documentation during a securing and restoration project: an example of successful approach. The case of the castle of Larciano (Pistoia – Italy)</b> Lapo SOMIGLI   Chiara MARCOTULLI   Francesca CHELI, ITA
16:40-17:00	<b>Sonar mapping and sampling of underwater archaeological excavations</b> Michael BOMMARDT-RIECHTER   Marco BLOCK-BERLITZ, GER
17:00-17:20	<b>Possibilities and Requirements for AR Applications in a Complex Heritage Landscape. An analysis from a technician's and a curator's perspective</b> Lukas André SUTHE   Hendrik ROHLAND   Marco BLOCK-BERLITZ   Christina FRANKEN, GER
17:20-17:40	<b>Images-based 3D documentation of a Persian garden using a low-cost technique</b> Ahmad RAJABI   Mohammad Moein DANESH, IRI
17:40-18:00	<b>From drone to web visualisation: accessing the 3D model of the Roman thermal complex of Massaciuccoli (LU)</b> Filippo SALA   Emanuele TACCOLA, ITA

09:30-10:00	COFFEE BREAK
Poster AWARD Presentation Peter DORNINGER, 4D-IT, AUT	
10:00-10:20	<b>Obsidian Maritime Interconnections in Early Holocene Eastern Mediterranean</b> Theodora MOUSIOU, CYP <b>Radiographic Imaging Technique applied on conservation archaeological metals: The case of Saruq al Hadid</b> Nooralhuda ALSOUKHNI, UAE <b>Adaptive and transformative visitor management applying the World Heritage Visitor Management Assessment and Strategy Tool (VMAST)</b> Cecilie SMITH-CHRISTENSEN, NOR <b>Turning point cloud into Building Information Model (BIM): Defining and validating accuracy requirements for existing buildings</b> Katja ŽAGAR   Laurens OOSTWEGEL   Katja MALOVRH REBEC, SLO <b>Augmented Reality (AR) Technology-based Digital Restoration of the Middle Gate in Hwangnyongsa Temple Site of the 8th Century Silla Dynasty Period</b> Heungsun KWON   Woook HAN   Hyowon SEO, KOR <b>The eyes of the city: Historic casement windows as a threatened asset of cultural heritage</b> Ulrich POINT, AUT <b>River Musi As a Living Heritage</b> Vedakumar MANIKONDA, IND <b>Ancient mounds in the developed urban structure of the city of Kherson</b> Sergiy NIEMTSEV   Andriy LUTSKY   Andriy LOPUSHYNSKYI   Natalie YURCHAK, UKR
Digital Tools for the Emergency Rescue of Cultural Heritage Chairs: Tobias BUSEN   Bernhard FRITSCH, GER	
10:20-12:00	<b>Digital Tools for the Emergency Rescue of Cultural Heritage</b> Tobias BUSEN   Bernhard FRITSCH, GER <b>Preservation and Protection of Cultural Heritage Resources using Arches</b> Dennis WUTHRICH, USA <b>Challenges of Applying Reality Capturing Methods in a Post-Conflict Urban Context: The Digital Survey in the Old City of Aleppo</b> Rahaf ORABI, HUN
12:00-13:30	LUNCH BREAK
Scientific work and citizen participation in cultural heritage during Covid-19 Chairs: Elisabeth MONAMY   Sigrid PETER, Wolfgang BÖRNER, AUT   Alessandro CAMIZ, TUR   Cristiana BARANDONI   Paolo GIULIERINI, ITA	
13:30-15:40	<b>Museums and Covid-19: adaptation of content and practice in the Trilj Regional Museum</b> Sanja BUDIĆ LETO, CRO <b>Engagement with classical archaeology and the ethics of contemporary clothing production: exploring the interface of citizen engagement through technologies at the London Bloomsbury Festival 2020</b> Claire FRAMPTON, UK <b>"Closed but active" Archaeology at the Natural History Museum Vienna</b> Karina GRÖMER   Stefan EICHERT, AUT <b>Online or not online-that's the question! Online presence of museums and cultural institutions in times of Covid19</b> Elisabeth MONAMY, AUT <b>Zoom?!?</b> Wolfgang BÖRNER, AUT <b>Pandemics and the changing built environment Learning from history, planning our future</b> Alessandro CAMIZ, TUR <b>Will Virtual Exhibitions Remain After Covid 19 Ends?</b> Müge ELMAS, TUR <b>"Virtual Excursions" in Archaeology</b> Ute VERSTEGEN   Lara MÜHRENBURG, GER
World Heritage Documentation and Monitoring with New Technologies Chairs: Mario SANTANA, Canada   Ulrike HERBIG, Austria	
15:40-18:00	<b>Opening Statement about World Heritage</b> Christina CAMERON, CAN <b>A Digital Bridge for Collaboration in Cultural Heritage</b> Aristotelis ANTONIOU   Alzbeta REJENTOVA   Paolo TOTO   Antipas PAPAGEORGIOU   Angelika PSENNER   Friedrich HAUER, ITA <b>Panelists:</b> Haifaa ABDULHALIM, JOR   Joe KALLAS, LIB   Rebecca NAPOLITANO, USA   Carmelo IGNACCOLO, USA/ITA   Douglas PRITCHARD, CAN <b>Rapporteur:</b> Doris GRANDITS, AUT

Location:  
**WIENER PLANUNGSWERKSTATT**

New bottles for old wine: The new CIDOC CRM and your old data Organizer: Stephen STEAD, UK	
13:00-16:30	Advanced Archaeological Training

Location:  
**WIENER RATHAUSKELLER**

Conference Dinner	
19:30-23:00	Mayor's Cocktail Opening: DI Omar AL-RAWI (Municipal Council)

# SCHEDULE I Thursday, 4 November 2021

Location: **WAPPENSAAL**

Location: **TOP 319**

Virtualization against the World's End: Creating new experiences for old places Chair: Giorgio VERDIANI, ITA	
09:00-09:20	<b>Representing Cultural Heritage Places through AR in Museums</b> Takehiko NAGAKURA   Wenzhe PENG   Yuxuan LEI, USA
09:20-09:40	<b>The integration of semantic knowledge graphs in virtual environments</b> Brigit DANThINE   Gerald HIEBEL   Erich KISTLER   Birgit ÖHLINGER   Caroline POSCH   Harald Stadler, AUT
09:40-10:00	<b>The underground church of Piedigrotta in Pizzo (VV). A digitalization project between drawing and matter.</b> Francesco STILO   Lorella PIZZONIA, ITA
10:00-10:30	COFFEE BREAK
10:30-10:50	<b>Dante's House Museum, A Virtual Tour enabling the enjoyment of cultural heritage</b> Adele MAGNELLI   Alessandro CAVALLARO   Davide PANTILE, ITA
10:50-11:10	<b>Resilient Rethinking Digital Documentation and Exhibition of the 'Salt Men of Zanjan'</b> Nicolas SCHIMMERL   Pia Patrizia WEBER   Thomas STÖLLNER, GER
11:10-11:30	<b>An Architectural Metaverse that Combines Dynamic and Static 3D data in XR: a Case Study at the Monastery of Simonos Petra</b> Nikolaos VLAVIANOS   Takehiko NAGAKURA, USA
11:30-11:50	<b>Redesign of a Cultural Heritage Digital Experience in a Lean Approach</b> Lijun MA, China
11:50-12:10	<b>AGora: An Augmented Reality-based Treasure Hunt Game for discovering the Municipal Market of Chania (Agora), Crete</b> Dania PANAGIOTA   Helena G. THEODOROPOULOU   Anna KARAGIANNI   Vasiliqi GEROPANTA   Panagiotis PARTHENIOS, GRE
12:10-14:00	LUNCH BREAK
14:00-14:20	<b>Immersive Technologies for Education in Heritage &amp; Design. An online program adapted for the Architecture track in times of COVID-19</b> Bruno DE ANDRADE   Marzia LODDO, ITA
14:20-14:40	<b>A Web App for the Documentation of Cultural Heritage</b> Kornelius GÖTZ, GER
14:40-15:00	COFFEE BREAK
Heritage Conservation Strategies and New Technologies Chairs: Ulrike HERBIG, AUT	
15:00-15:20	<b>The eyes of the city: Historic casement windows as a threatened asset of cultural heritage</b> Ulrich PONT, AUT
15:20-15:40	<b>New approaches toward reductive thermal insulation of Gründerzeit facades via autonomous robotics</b> Bernard SOMMER   Peter BAUER   Ulrich PONT, AUT
15:40-16:00	<b>Building physics and the built environment: a retrospective on research driven innovation toward more sustainable building stock</b> Ulrich PONT, AUT
16:00-16:20	<b>The masonry of three-lobed churches</b> Irimia MIHAL, ROU
16:20-16:40	<b>X-ray radiography in conservation</b> Nooralhuda ALSOUKHNI, UAE
16:40-17:00	<b>APP Award</b> Günther WEINLINGER   Michael KLEIN, 7reasons, AUT
17:00-17:20	<b>Hyderabad Heritage</b> Ar Madhu VOTTERY, IND <b>Baker House AR (2021)</b> Takehiko NAGAKURA, USA <b>Tod im Salz</b> Nicolas SCHIMMERL, GER <b>AUGTRAVELER</b> Pankaj MANCHNANDA, IND
17:20-17:40	<b>Poster Award Ceremony</b> Peter Dorninger, 4D-IT, AUT
17:40-17:40	<b>Best Student Paper Award</b> Nadine ALPINO, Luxembourg   Martina POLIG, CYP   Giorgio VERDIANI, ITA

PhD/Master Session 2021 Chairs: Martina POLIG, CYP   Nadine ALPINO, LUX	
09:00-09:20	<b>Reality VS Virtual Modeling. From Building to Landscape Heritage Representation</b> Ambra BARBINI   Chiara CHION, ITA
09:20-09:40	<b>The Mediterranean Medinas and Cities in the Middle Ages: Urban heritage, Jurisprudence, Traditions and Built form</b> Meriem BEN AMMAR, Italy
09:40-10:00	<b>Sacred Spaces: ELECTRONIC PLACES A hybrid methodology to read and design for historic urban religious precincts</b> Anubhav BORGHAIN, IND
10:00-10:30	COFFEE BREAK
10:30-10:50	<b>Architectural Heritage and Climate Change: Performance Prediction of Exposed Natural Building Stone to Rainfall through a Combination of Laboratory Leaching Tests and X-ray Computed Tomography</b> Noemi GIOVELLI   Cristina GONZALEZ-LONGO   Christine M. DAVIDSON, UK
10:50-11:10	<b>Digital enhancement of African museum collections: Lessons learned from the virtual exhibition project "Heritage costumes in Cameroon: Dressing for identity"</b> Jean-Paul Cypriano LAWSON, FRA
11:10-11:30	<b>Turning point cloud into Building Information Model (BIM): Defining and validating accuracy requirements for existing buildings</b> Katja ŽAGAR   Laurens OOSTWEGEL   Katja Malovrh REBEC, SLO
11:30-11:50	<b>Identity and vulnerability in a port-city: architectural strategies for disaster risk reduction of the built heritage</b> Steluta TOPALOV, ROU
12:00-14:00	LUNCH BREAK
Bamiyan World Heritage: The Present and The Future Chairs: Alireza IBRAHIMI   Hossein REZAYE, AFG	
14:00-16:40	<b>Part 1: Round Table</b>
	<b>The high relief pattern of Bamiyan statues</b> Zakaria AHMADI, AFG
	<b>Investigation of Artificial Intelligence in the Development of Tourism in Bamyan</b> Mohammad Reza AMIRI   Marzieh KARIMI, AFG
	<b>Assessment of the factors affecting the physical resilience of Bamiyan cultural heritage against climate change</b> Ateyeh HEYDARI   Mohammad Mahdi SALEHI, AFG
	<b>Investigating the Effect of Malicious Factors on Ancient Sites to Maintain and Protect Them Using the Geographic Information System (GIS); Case Study: Budda-Bamyan</b> Mohammad MOVAHEDI   Hossein REZAYE, AFG
	<b>Assessing the Condition and Improving the Sidewalks of the World Cultural Heritage. Case Study: Bamiyan Buddha Statues in Afghanistan</b> Mohammad Reza PAIMAN   Nasibe SADAFI   Tayebeh NAZARIAN, AFG
	<b>Investigation of factors and risks threatening the environmental health of natural lakes in Band-e Amir National Park, Bamyan</b> Mohammad Marzieh KARIMI     Mohammad Reza AMIRI, Afghanistan
	<b>Part 2: Discussion Panel</b>
	<b>An overview of plans of the Ministry of Urban Development to protect Bamyan Cultural Heritage</b> Mohammad Zahir SHEWA, AFG
	<b>Zaker Hossain ERSHAD, AFG</b>
	<b>Abdul Razaq VAHIDI, AFG</b>
	<b>Qasim WAFAYEZADA, AFG</b>
	<b>Can we collect an appeal worldwide to protect women and cultural property in Afghanistan? What happened to eng Pashtun?</b> Michael JANSEN, GER
	<b>Preservation of the Cultural Landscape of Bamiyan: A chance for peace and reconciliation</b> Georgios TOUBEKIS, GER
<b>The protection of Cultural Heritage in the Bamiyan Strategic Masterplan</b> Mirella LODA, ITA	
<b>Conclusion</b>	

Location: **Kunsthistorisches Museum**

<b>The Roman Life - Game around the Roman Gallery in the Kunsthistorische Museum</b> Organiser: Shani ZIV   Talila YEHIEL, Israel	
10:00-13:00	<b>Advanced Archaeological Training</b>

Location: **WIENER PLANUNGSWERKSTATT**

<b>Geospatial Analysis and Simulation in Archeology using Open Tools</b> Organizer: Christian NEUWIRTH, Austria	
13:30-16:00	<b>Advanced Archaeological Training</b>

Location: **Restaurant Blunznstricker**

<b>Informal Closing</b>	
19:30-23:00	<b>Evening Event</b> Opening: DI LÖFFLER (City Council Ottakring)