

3D Imaging in Cultural Heritage

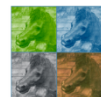
9th-10th November 2017

The British Museum



3D Imaging in Cultural Heritage conference will be held in the British Museum on the 9th-10th November 2017. The conference will cover a wide range of methods and applications of 3D imaging, as well as how 3D data can be used both for research and to engage with the public. The conference is supported by IPERION-CH (Integrated Platform for the European Research Infrastructure on Cultural Heritage).

The British
Museum



IPERION CH

3D Imaging in Cultural Heritage PROVISIONAL PROGRAMME, British Museum

Thursday, 9th November 2017

09.00 – 09.45

Registration

09.45 – 10.00

Welcome & Introduction

Carl Heron & Daniel Pett
British Museum

Session One

Session Chair: *Jennifer Wexler, British Museum*

10.00 – 10.40

Keynote Talk:
3D Imaging, Cultural Heritage and TV

Michael Scott
University of Warwick

10.40 – 11.00

3D Reconstruction of Niniveh

*Naphur van Apeldoorn¹,
Boris Lenseigne¹,
Pieter Jonker¹, Joris Dik¹ &
Lucas Petit²*
¹*University of Technology Delft*
²*National Museum of Antiquities,
Leiden*

11.00 – 11.15

*The Must Farm Pile dwelling: An Integrated
3D Workflow and Analysis*

Donald Horne
Cambridge Archaeological Unit

11.15 – 11.30

*Virtual Roman Frontiers: 3D Visualisation and
Innovative Technology Applications for the
Antonine Wall*

*Lyn Wilson, Patricia Weeks,
Alastair Rawlinson, Erik Dobot,
Christof Fluegel & Carsten
Hermann*
Historic Environment Scotland

11.30 – 11.50

Tea, Coffee and 3D Exhibitions Stands and Posters

Session Two

Session Chair: *Robert Speller, University College London*

11.50 – 12.15

*New Investigations and 3D Computed Tomography
Reconstruction of the Antikythera Mechanism,
Using 3D X-ray CT data and 3D CAD Software*

*David Higgon, Tony Freeth
Ashkan Pakzad, Francesco
Iacoviello, Andrew Ramsey,
Robert Speller, Jennifer Griffiths,
Adam Gibson*
University College London

12.15 – 12.30

*A Micro-CT Reconstruction of a 16th Century
Miniature Carved Boxwood Tabernacle in the
British Museum Waddesdon Bequest (WB.233) and
an Investigation into Methods of its Manufacture*

Philip Fletcher¹, Dora Thornton²
¹*University of Bath,* ²*British
Museum*

12.30 – 12.50

*The Digital Pilgrim Project and
the Object Resource Box*

Amy Jeffs
University of Cambridge

13.00 – 14.00

Lunch and 3D Exhibitions Stands and Posters

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Session Three

Session Chair: *Carl Heron, British Museum*

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| 14.00 – 14.15 | <i>Whale of a Project: How to Scan the World's Largest Animal</i> | <i>Kate Burton
Natural History Museum</i> |
| 14.15 – 14.30 | <i>Confocal Microscopy Applied to Natural History Specimens</i> | <i>Tomasz Goral
Natural History Museum</i> |
| 14.30 – 14.45 | <i>3D Documentation of Rock Art in Megalithic Structures in Brittany (France) and its Application as an Aid to Curators</i> | <i>Valentin Grimaud, Serge Cassen
Université de Nantes</i> |
| 14.45 – 15.00 | <i>UAV photogrammetry potential for the recording of fragile fossils: a preliminary assessment</i> | <i>Ashleigh L. A. Wiseman,
Alex Moore, Michael Checkley,
Frederic Bezombes, Isabelle De Groote
Liverpool John Moores University</i> |

15.00 – 15.20 Tea, Coffee and 3D Exhibitions Stands and Posters

Session Four

Session Chair: *Chiara Bonacchi, Institute of Archaeology, UCL*

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| 15.20 – 15.35 | <i>How Practical Can It Be? Photogrammetry and 3D Modelling in the Documentation and Conservation of Cultural Heritage</i> | <i>Ana Patrícia Monteiro</i> |
| 15.35 – 15.50 | <i>Integrating Multispectral Imaging, Reflectance Transformation Imaging (RTI) and Photogrammetry for Archaeological Objects</i> | <i>Emily B. Frank, Sebastian Heath,
Chantal Stein
New York University</i> |
| 15.50 – 16.05 | <i>Co-Production in 3D Imaging</i> | <i>Eilish Clohessy
Derby Silk Mill Museum</i> |
| 16.05 – 16.20 | <i>See-Through Museum Project: A Complete Imaging Pipeline for Cultural and Natural Heritage</i> | <i>A. Kostenko, R. van Liere,
K.J. Batenburg
University of Amsterdam</i> |

16.20 – 16.40 Break and 3D Exhibitions Stands and Posters

16.40 – 17.30

Session Five: Pecha Kucha

Illegible Forever or Virtually Retrievable? The Possibilities of 3D Tools on Hard-to-Read Inscriptions

*Miguel Carrero-Pazos
David Espinosa-Espinosa*

Visualising the Operation of a 15th/16th-Century Pottery Kiln at Newport, Pembrokeshire, UK

*David Dawson, Oliver Kent,
Bill Stebbing*
Scan to Plan

Neutron Tomography of 'Pattern-Welded' Swords From the Viking Age

*A. Fedrigo, M. Strobl, A.R. Williams, L. Jørgensen, P. Pentz, K. Lefmann, P.E. Lindelof, B. Schillinger, A. Scherillo, and F. Grazzi
ISIS Neutron and Muon Source,
STFC Rutherford Appleton
Laboratory*

Preserving and protecting Ancient Pueblo Heritage and Landscapes: 3D Scanning in the Canyons of the Mesa Verde Region, Colorado, USA

*Radosław Palonka, Bolesław Zych
Institute of Archaeology
Jagiellonian University*

3D Reconstruction in an Illumination Dome

*Lindsay MacDonald, Stuart Robson, Mona Hess
University College London*

Combining Scan Technologies to Solve Complex Imaging Problems

*Amy Scott-Murray
Natural History Museum*

17.30 – 18.00

Keynote Talk:
Exploring Egyptian Mummies: From CT scans to 3D Visualisations

***Daniel Antoine
British Museum***

18.30 – 19.40

Wine Reception – Egyptian Sculpture Gallery

3D Imaging in Cultural Heritage PROVISIONAL PROGRAMME, British Museum

Friday, 10th November 2017

09.00 – 09.30 **Registration**

09.30 – 10.10 **Keynote talk:** **Farah Ahmed**
TBA **Natural History Museum**

Session One

Session Chair: *Amelia Knowlson, Sheffield Hallam University*

10.15 – 10.30 *A Victorian Explorer and the Ancient Maya
in 3D: The Google Maya Project at the
British Museum* *Claudia Zehrt¹, Kate Jarvis¹, Jago
Cooper¹, Mona Hess²
¹British Museum, ² University
College London*

10.30 – 10.45 *Education and Professional Development for New
Cross-Disciplinary Roles in 3D Imaging and Digital
Heritage Technologies in Europe* *Mona Hess
University College London*

10.45 – 11.00 *All-Round Experience: Using Gesture-Controlled
Multi-Sensory Technology to Unlock Museums for
a Learning Disabled Audience* *Helena Garcia Carrizosa¹, Joanna
Wood², Andreas Reichinger³
¹Open University, ²University of
Sussex, ³VrVis Zentrum für Virtual
Reality und Visualisierung
Forschungs-GmbH*

11.00 – 11.20 **Tea, Coffee and 3D Exhibitions Stands and Posters**

Session Two

Session Chair: *Dan O'Flynn, British Museum*

11.20 – 11.35 *Neutron Imaging – A Non-Destructive Testing
Method Providing an Alternative Perspective to
Cultural Heritage Objects* *David Mannes, Eberhard
Lehmann
Paul Scherrer Institute*

11.35 – 11.50 *Revealing the Secrets of an Umbrian Madonna
and Child at National Museums Scotland* *Diana de Bellaigue, Lore Troalen,
Xavier Dectot
National Museums Scotland*

11.50 – 12.05 *3D Imaging with Neutrons – Delivering
Information beyond X-rays* *Burkhard Schillinger¹, Michael
Laass², Clément Zanolli
Amélie Beaudet³
¹Technische Universität
München, ²Universität
Duisburg-Essen, ³University
Toulouse III - Paul Sabatier*

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12.05 – 12.20	<i>A 3D Understanding of the Varnish Layers in Rembrandt's Marten and Oopjen</i>	<i>Katrien Keune¹, Petria Noble¹, Gwen Tauber¹, Susan Smelt¹, Esther Van Dijn¹, Michel Menu², Elizabeth Ravaud², Gilles Bastian², Witold Nowik², Silvia Prati³, Giorgia Sciutto³, Rocco Mazzeo³, Aldo Roda³, Mitra Almasian⁴, Leah Wilk⁴, Maurice Aalders⁴, Henk van Keulen⁵ ¹Rijksmuseum, ²C2RMF, ³University of Bologna, ⁴Academic Medical Center, The Netherlands, ⁵Cultural Heritage Agency of the Netherlands</i>
12.20 – 13.20	Lunch and 3D Exhibitions Stands and Posters	
	Session Three Session Chair: <i>Graeme Earl, Kings College London</i>	
13.20 – 13.35	<i>Computed Tomography for the Study of Large Artworks and Archaeological Materials by Means of a Customised Instrumentation</i>	<i>Alessandro Re, Alessandro Lo Giudice, Marco Nervo Università di Torino</i>
13.35 – 13.50	<i>Post-Processing for 3D-Computed Tomography Data of Musical Instruments</i>	<i>Sebastian Kirsch, Niko Plath GMN</i>
13.50 – 14.05	<i>Lift the Veil off the Block Samples from the Warcq Chariot Burial (Ardennes, France): CT-scan, Photogrammetry, 3D Printing and Mixed Reality</i>	<i>Nicolas T., Gaugne R., Tavernier. C., Millet E., Bernadet R., Arnaldi B. and Gouranton V. L'Institut National de Recherches Archéologiques Préventives</i>
14.05 – 14.20	<i>Post-Mortem Practices in the Mesolithic of Brittany : A Multi-Modal Digital Approach</i>	<i>Jean-Baptiste Barreau, Ronan Gaugne, Grégor Marchand, Jorge Calvo Gómez, Rozenn Colleter, Valérie Gouranton Centre de Recherche en Archéologie, Archéosciences, Histoire</i>
14.20 – 14.40	Tea, Coffee and 3D Exhibitions Stands and Posters	

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Session Four

Session Chair: *TBA*

14.40 – 14.55	<i>SfM modelling of Amara West</i>	<i>Neal Spencer British Museum</i>
14.55 – 15.10	<i>On Friction & Movement. 3D-Metamodeling Christopher Polhem's Mechanical Alphabet</i>	<i>Pelle Snickars Umea University</i>
15.10 – 15.25	<i>Using a Modified Camera for Integrated Spectral and 3D Imaging to Monitor Cultural Heritage Objects</i>	<i>E. Keats Webb, Lindsay MacDonald, Danny Garside, Stuart Robson University of Brighton</i>
15.25 – 15.40	<i>Old Casts in a New Light: 19th Century Plaster Casts of Classic Maya Artefacts as Cultural Heritage and Efforts for their Digital Preservation and Analysis</i>	<i>Christian Prager¹, Hubert Mara² ¹Bonn University ²Heidelberg University</i>
15.40 – 15.50	<i>Closing Remarks</i>	