Sunday, October 12th (optional)

6:00 – 7:00 p.m. “Traces of the Past” Remote Sensing Exhibit Opening
Smith Warehouse Bay 10-11, Second Floor

Monday, October 13th

8:00 – 9:00 a.m. Breakfast and Registration Schiciano Lobby

9:00 – 9:15 a.m. Welcome Schiciano A
Sally Kornbluth, Provost, Duke University
Mary T. Boatwright, Chair, Department of Classical Studies, Duke University
Tom Katsouleas, Dean, Pratt School of Engineering, Duke University
Maurizio Forte, Conference Chair

9:15 – 10:00 a.m. Keynote Schiciano A
“From a radiography of the past to a new archaeological diagnosis of sites and landscapes” Frank Vermeulen, University of Ghent

10:00 – 1:00 p.m. Morning Paper Sessions
Session 1: Remote Sensing I (7 papers) Schiciano A
Chair: David Cowley

- 10:00 “Large Scale Geomagnetic Surveys in Archaeology.” Rainer Komp, German Archaeological Institute
- 10:20 “CASTLE3D - A Computer aided system for labeling archaeological excavations in 3D.” Hamidreza Houshiar, Jacobs University
- 10:40 “Integration of Multiproxy Landscape and Climate Data with Hyper- and Multi-Spectral Satellite Imagery for the Analysis of Landscape Change.” William Middleton, Rochester Institute of Technology
- 11:00 “Is the Relationship between Surface and subsurface temperate is a key for Archeological studies?” Seyed Kazem Alavipanah, University of Tehran
- 11:20 “A Non-Destructive Remote Sensing Project Testing of Geoarchaeology Radar In South Texas.” Rolando Silva, University of Texas- Rio Grande Valley
- 11:40 “Tracing the Traditional Water Systems known as Karez in Southern Afghanistan.” Phillip Stinson, University of Kansas
- 12:00 “A Collaborative Multi - Sensor Approach to Interpreting the Landscape at House in the Horseshoe, Sanford, North Carolina.” Jacob Turner, University of North Carolina at Greensboro
Session 2: Integrated Technologies I (8 papers) Schiciano B  
Chair: Stefano Campana

- 10:00  “Viewshed Analysis at Multiple Scales: GIS Methods on the Medieval Iberian Frontier Landscape and 3D Intervisibility at a Reconstructed Fortress-Monastery.” Edward Triplett, University of Virginia


- 10:40  “Using Orthophotography and photogrammetry in Preventive Archaeology, methods and limits. The case of Quincieux Grange Rouge site near Lyon (France).” Bertrand Moulin, INRAP

- 11:00  “Terrestrial Laser Scanning and Unmanned Aerial Systems to Investigate Historical Rice Cultivation at Wormsloe Historic Site.” Alessandro Pasqua, University of Georgia

- 11:20  “The Simbolic Landscape of Archaeological Zone of El Tajín, Veracruz; México.” Patricia Castillo, Instituto Nacional de Antropología e Historia


- 12:00  “Getting Closer to Iron Age through Remote Sensing--Investigations in eastern Austrian pre-Alpine landscapes.” Martin Fera, University of Vienna

- 12:20  “Archaeology in the Age of Supercomputing.” Devin White, Oak Ridge National Laboratory

10:00 – 12:00  Workshop 1 Teer 115  
Archaeological Applications of Airborne Laserscanning with Rachel Opitz, University of Arkansas

*a/v projector with power for independent computers

1:00 – 2:00  Lunch and Demos Fitzpatrick Center Atrium

2:00 – 2:45  Keynote Schiciano A  
“Prospects for Immersive Virtual Reality and Telepresence for Archaeology” Henry Fuchs, University of North Carolina at Chapel Hill

3:00 – 6:00  Afternoon Paper Sessions Schiciano A

Session 1: Remote Sensing II (5 papers) (Schiciano Auditorium A)  
Chair: David Cowley
• 3:00 “Remote Sensing Amerindian archaeology in the Caribbean – Methods and Practice.” Till Sonnemann, Leiden University

• 3:20 “A Long Walk in the Italian Countryside: Large-scale geophysical prospection in rural and urban contexts in central Italy.” Stefano Campana, University of Cambridge

• 3:40 “Investigating Late Bronze Age urban landscapes on Cyprus using terrestrial and aerial remote sensing.” Kevin Fisher, University of British Columbia

4:00 – 4:30 Coffee Break - Schiciano Lobby

• 4:30 “Remote Sensing as a Method of Promoting Group Identity: Rediscovering Edinburg’s African-American Cemetery.” Rolando Silva, University of Texas- Rio Grande Valley

• 4:50 “Container and contents: analogies and senses of the past in the museum.” Alicia Jiménez, Duke University

• 5:10 "Remote Sensing and Mapping for Spiro Mounds: Landscape Analyses at Multiple Scales.” Jami Lockhart, Arkansas Archaeological Survey

Session 2: Integrated Technologies II (8 papers) (Schiciano B) Chair: Stefano Campana

• 3:00 “Combining Multispectral Satellite Imagery and LiDAR in Archaeological Site Prospection: A Case Study in Honduras.” Daniel Thompson, Archaeological Modeling International

• 3:20 “New Approaches to the Polysensing Environment.” Bill Seaman, Duke University

• 3:40 “A Dynamic Study of Multi-scale Space Monitoring on the Great Wall and Surrounding Environment.” Chuansheng Liu, Institute of Remote sensing and Digital Earth, Chinese Academy of Sciences

4:00 – 4:30 Coffee Break – Schiciano Lobby

• 4:30 “Documenting the past: the use of digital technologies for intra-site archaeological documentation.” Nicolo Dell’Unto, Lund University

• 4:50 “From the Field to the Classroom: Developing Pedagogy in Digital Humanities.” Chad Keller, Savannah College of Art and Design

• 5:10 “Spatial Study of 'Chandhore' in India's western Ghats -- Using Ethno-historic study and Sculptural details as complimentary factors to spatial techniques.”
Pallavee Gokhale, Symantec

- 5:30 “From Data to Experience: Integrating Multiple Datasets to Create an Immersive Representation of Ancient Tiwanaku.” James Wesolowski, University of Arkansas


3:00 – 5:00 ECAI Workshop Teer 203
Place: Context, Analytics, Imaging Lewis Lancaster, University of California at Berkeley, ECAI

3:00 – 6:00 NASA Workshop Teer 115
Archaeology as Earth Science: A NASA Perspective Ronald Blom, Douglas Comer, Will Megarry, Till Sonnemann, Bryce Davenport

6:30 – 7:00 p.m. Transportation to Nasher Museum for Reception Science Drive Circle

7:00 – 8:30 Welcome Reception—Nasher Museum of Art
Duke Jazz Band

8:30 p.m. Transportation to the Hilton Garden Inn & Bryan Center at Duke

Tuesday, October 14th

8:30 – 9:15 Breakfast Schiciano Lobby

9:15 – 10:00 Keynote Schiciano A
“Prospecting Archaeological Landscapes – State-of-the-art in remote sensing and geophysical prospection” Wolfgang Neubauer, University of Vienna

10:00 – 1:00 Morning Paper Sessions

Session 1: Virtual Reality and 3D Modeling I (5 papers) Schiciano A
Chair: Alonzo Addison

- 10:00 “A methodological approach for the 3D reconstruction of the medium Tiber Valley landscape in the Orientalizing period.” Eva Pietroni, CNR

• 10:40  “Integrated Approaches: Combining SFM and scene-level modeling for data exploration, interpretation and publication of the excavations at Gabii (Italy).” Rachel Opitz, University of Arkansas

• 11:00  “DigUB: using 4D modeling to address archaeological questions in a prehistoric open-air archaeological site. 'Ubeidiya, Israel, as a case study.” Miriam Belmaker, University of Tulsa

• 11:20  “The ancient salt marsh landscape of the Venice lagoon.” Sophia Sennett, Duke University

Session 2: GIS and Sensing (7 papers) Schiciano B
Chair: Heather Richards-Rissetto

• 10:00  “Graeco-Roman Astro-Architecture?: The Temples of Pompeii.” Vance Tiede, Astro-Archaeology Surveys

• 10:20  “Analysis of Sasanian Settlement Pattern in the Intermontane Plain and Valleys of Farsan, Iran.” Hossein Habibi, Bu-Ali Sina University

• 10:40  “Remote Archaeological Survey at Polygon of Protection of “El Tajín”, Veracruz, México.” Guadalupe Zetina-Gutierrez, Instituto Nacional de Antropología e Historia

• 11:00  “Community, Land, and Water: A Critical Look at 3,500 Years of Human Settlement in the Basin of Mexico.” John Millhauser, North Carolina State University

• 11:20  “Testing predictive models for palaeontological site location in the Eocene of Wyoming.” Robert Anemone, University of North Carolina at Greensboro

• 11:40  “Identifying Use of Lands, Territories and Movements in Maya Signoury of Palenque, Chiapas; México.” Guadalupe Zetina-Gutierrez, Instituto Nacional de Antropología e Historia

• 12:00  "3D-GIS in Pompeii: an exploratory approach to the study of insula V 1.” Nicolo Dell’Unto, Lund University

10:00 – 1:00  Workshop 1 Teer 203
   Hands on Open Source GIS Scott Madry, University of North Carolina at Chapel Hill

10:00 – 12:00  Workshop 2 Teer 115
GIS and Data Integration for Archaeological Surveying Data  
Axel Posluschny, ARCLAND

1:00 – 2:00  
Lunch and Demos  
Fitzpatrick Center Atrium

2:00 – 2:45  
Keynote: Schiciano A  
“Measuring the Face of the Past and Facing its Measurement”  
William (Fred) Limp, University of Arkansas

3:00 – 6:30  
Afternoon Paper Sessions

Session 1: Virtual Reality and 3D Modeling II  (6 papers)  
Schiciano A  
Chair: Alonzo Addison/Maurizio Forte

- 3:00  “Remembering and forgetting: the addition and subtraction of object context by using 3D printing.”  
Peter Brugger, University of Southampton

- 3:20  “The Livia's Villa Reloaded project.”  
Eva Pietroni, CNR

- 3:40  “A Head of Our Times: Re-Imagining the Heads of the Brummer Collection with Real-Time 3D Face Scanning.”  
Chris Tralie and Amanda Lazarus, Duke University

4:00 – 4:30 Coffee Break  
Schiciano Lobby

- 4:30  “The Regium@Lepidi 2200th Project.”  
Nevio Danelon, Duke University

- 4:50  “Techniques and Applications for a virtual Simulation of the agora of Segesta.”  
Riccardo Olivito, Scuola Normale Superiore

- 5:10  “Visualizing Socio-Environmental Landscape Dynamics: A Case Study from Copan, Honduras.”  
Heather Richards-Rissetto, University of Nebraska- Lincoln

Session 2: Lidar Applications  (9 papers)  
Schiciano B  
Chair: Rachel Opitz

- 3:00  “New Perspectives on Purepecha Urbanism Through the Use of LiDAR.”  
Christopher Fisher, Colorado State University

- 3:20  “LiDAR at Angamuco, moving beyond visual interpretation in the use of LiDAR.”  
Stephen Leisz, Colorado State University

- 3:40  “Modeling Archaeological Landscapes in Peru with Ground based LiDAR.”  
Patrick Williams, The Field Museum and University of Illinois

4:00 – 4:30 Coffee Break
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<th>Time</th>
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<th>Speaker</th>
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<tr>
<td>4:30</td>
<td>“A methodology for using ALS data for reconstruction of historic road networks.”</td>
<td>Willem Vletter</td>
<td>University of Vienna</td>
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<td>4:50</td>
<td>“Robot Meets History”</td>
<td>Dorit Borrmann</td>
<td>University of Würzburg</td>
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<td>5:10</td>
<td>“Integrating terrestrial and airborne lidar with structure from motion photogrammetry for documenting industrial heritage landscapes in the Central Appalachians.”</td>
<td>Charles Yuill</td>
<td>West Virginia University</td>
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<td>5:30</td>
<td>“Application of LIDAR ground-surface surveying technology to surface survey of topographically complex urban settlements: Tell es-Safi/Gath, Israel”</td>
<td>Deland Wing</td>
<td>University of Manitoba</td>
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<td>5:50</td>
<td>“Terrestrial Lidar and GPR investigations into the Third Line of Battle at Guilford Courthouse National Military Park, Guilford County, North Carolina.”</td>
<td>Stacy Curry</td>
<td>University of North Carolina at Greensboro</td>
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<td>6:10</td>
<td>“La Aplicación de Nueva tecnología como LiDAR y Fotografía Aérea como una Línea de Barrido en el Sito Arqueológico de El Tajín, Veracruz, México.”</td>
<td>Krassimir Iankov</td>
<td>Sistemas Avanzados y Proyectos</td>
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<td>6:30</td>
<td>&quot;The Use of LiDAR to Detect New Settlements in the Mosquitia, Honduras&quot;</td>
<td>Christopher Fisher</td>
<td>Colorado State University</td>
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**Session 3: Geophysics** (8 papers) Teer 203

*Chair: Wolfgang Neubauer*

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<tr>
<td>3:00</td>
<td>“Ground-Penetrating Radar, Magnetometry, and Excavations at the Mississippian Pile Mound Site, Upper Cumberland Plateau, Tennessee, USA.”</td>
<td>Jeremy Menzer</td>
<td>East Tennessee State University</td>
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<td>3:20</td>
<td>“Applications of acoustic, magnetometric and topographic submarines devices for an underwater archaeological method research in preventive archaeology.”</td>
<td>Philippe Pelgas</td>
<td>INRAP</td>
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<td>3:40</td>
<td>“Archaeological Compounds at the Southern Brazilian Coast”</td>
<td>Tiago Attorre</td>
<td>University of São Paulo</td>
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**4:00 Coffee Break**

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<tr>
<td>4:30</td>
<td>“Large-Area Magnetic Gradient Survey at Native American Earthwork Sites in Ohio, USA.”</td>
<td>Jarrod Burks</td>
<td>Ohio Valley Archaeology, Inc.</td>
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<td>4:50</td>
<td>“Alcatraz in 3D: Terrestrial laser scanning and subsurface ground-penetrating radar reconstruction of the prison and Civil War era historic fortifications”</td>
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at “The Rock”.” *Timothy de Smet, Texas A&M University*

- **5:10** “Using Ground-Penetrating Radar to Study Sites in the American Southwest: New Approaches to An Old Method.” *Jennie Sturm, University of New Mexico*

- **5:30** “An integrated archaeological prospection and excavation approach at the Neolithic circular ditch system in Hornsburg, Austria.” *Jakob Kainz, University of Vienna*

- **5:50** “Ground Penetrating Radar prospections at complex archaeological sites: good practice for the 3D archaeological documentation of the subsurface features.” *Valeria Poscetti, University of Vienna*

**6:30 – 7:00 p.m.** Transportation to Sarah P. Duke Gardens for Dinner *Science Drive Circle*

**7:00 – 9:00** Social Dinner at Sarah P. Duke Gardens

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**Wednesday, October 15th**

**8:30 – 9:30** Breakfast and “Traces of the Past” Remote Sensing Exhibit *Smith Bay 10*

**9:30 – 12:30** Morning Paper Sessions *The Garage*

**Session 1: Cultural Resource Management** (4 papers) *Smith Bay 10
Chair: Maurizio Forte*

- **9:30** “Magnetometry and its use in the Bakken Oilfield.” *Timothy Dodson, KLJ*


- **10:10** “Ethics for Archaeologists Using Remotely Sensed Imagery in War-Torn Landscapes: A Case Study in Southern Afghanistan.” *Anna Wieser, University of Kansas*

- **10:30** "Multi-granular method for retrieving digital Tangkha images” *Chuansheng Liu, Institute of Remote sensing and Digital Earth, Chinese Academy of Sciences*
Session 2: Aerial Photography and Drones (8 papers) The Garage  
Chair: Axel Posluschny

- 9:30  “The Aerial Bombing of Pointe du Hoc, Normandy, France: A re-analysis based on contemporary aerial reconnaissance photography and field surveys.” Richard Burt, Auburn University

- 9:50  “The CRO Flies On: Locations and Landscapes in American History and Prehistory.” Tommy Hailey, Northwestern State University of Louisiana

- 10:10 “3D Recording in the Documentation of Archaeological Excavations.” Stefano Campana, University of Cambridge

- 10:50 “Methods and Techniques of UAV Based Cliff Painting Investigation In Complex Terrains——Using the Zuo Jiang Cliff Painting as An Example.” Li Zhe, Tianjin University

- 11:10 “Visualization of Archaeological Sites and Landscapes along the Missouri River Using Historical Aerial Photographs and Digital Photogrammetry” Adam Wiewel, University of Arkansas

- 11:30 “UAV-based aerial thermography and archaeological geophysics at the Collins Mound site, Arkansas.” Stephanie Sullivan, University of Arkansas

- 11:50 “Pre- and proto-historic anthropogenic landscape modifications in Siem Reap province (Cambodia) as seen through satellite imagery.” Kasper Hanus, University of Sydney

9:30 – 12:00  **Workshop 1  Robertson Scholars Board Room**  
Survey and Measurement on Excavation - New Perspectives on Traditional Metrics, Rachel Opitz, University of Arkansas

11:00 – 12:30  **Workshop 2  FHI Conference Room**  
The Digital Heritage Federation - The needs and requirements of a new professional association in this cross-disciplinary domain, plus planning for DH2015

12:30  **Lunch and “Traces of the Past” Remote Sensing Exhibit The Garage**

End of Conference