



**Program and Event Schedule**

## WEDNESDAY

### **Registration Opens at 8:00 AM**

*Outside Weavers and Potters Rooms*

### **9:00 – 5:00 ICA Commission on Open Source Geospatial Technologies**

*Potters Room*

### **9:00 – 1:00 ICA Commission on Map Projections: Teaching Map Projections in Cartography and GIS**

*Weavers Room*

## THURSDAY

### **9:00 – 10:00 Keynote Host: Scott Freundschuh**

*Potters Room*

#### **How Can Maps be Relevant for the Global Sustainable Development Goals?**

**Menno-Jan Kraak**, University of Twente and President of the International Cartographic Association

### **10:00 – 10:30 Morning Break**

*Outside Weavers and Potters Rooms*

### **10:30 – 12:00 Session I**

#### **GeoVisualization I. Session Chair: Daniel Cole**

*Potters Room*

##### **Examining 3D GIS as Enabling Technology for On-campus Situational Awareness**

Paddington Hodza, Sitian Xiong, Cameron Sloan, Wendy Berelson and Jeffery Hamerlinck

##### **Visualizing Travel Time: Approaches, Perceptual Quality and User Issues**

Sungsoo Ray Hong and Sarah Battersby

##### **Educating the Public With Maps and GIS in Museum Exhibits**

Daniel Cole

### **10:30 – 12:00 Session 2**

#### **Spatial Data I. Session Chair: Aileen Buckley**

*Weavers Room*

##### **Exploring the Potential of Integrated Cadastral and Building Data for Evaluation of Remote-Sensing based Multi-Temporal Built-up Land Layers**

Johannes H. Uhl, Stefan Leyk, Aneta J. Florczyk, Martino Pesaresi and Deborah Balk

##### **Interoperability in Planetary Research For Geospatial Data Analysis**

Trent M. Hare

##### **Unholey Maps: How to Deal with Holes in Your Data Sets**

Aileen Buckley

### **12:00 – 1:30 Lunch: On Your Own**

### **1:30 – 3:00 Session 3**

#### **Geographic Features. Session Chair: Dalia Varanka**

*Potters Room*

##### **Information Extraction Based on the Concept of Geographic Context**

Stefan Leyk and Yao-Yi Chiang

##### **LiDAR Models for Archaeological Feature Detection in Mayan Sites**

Richard K. Ellsworth

##### **Spatial Concepts for Hydrography Ontology Alignment**

Dalia E. Varanka and Michelle Cheatham

### **1:30 – 3:00 Session 4**

#### **Spatial Data II. Session Chair: Kaile Bower**

*Weavers Room*

##### **Open Transport Map: Open Harmonized Dataset or Road Network**

Karel Jedlička, Pavel Hájek, Jan Ježek, František Kolovský, Tomáš Mildorf, Karel Charvát,

Dmitrii Kozhukh, Jan Martolos, Jan Šťastný and Daniel Beran

##### **Integrating SDI and Linked Open Data: A Case Study Using Administrative Boundaries**

Silvana Philippi Camboim and Claudia Robbi Sluter

##### **Smart Points of Interest: Big, linked and Harmonized Spatial Data**

Otakar Cerba and Tomas Mildorf

### **3:00 – 3:30 Afternoon Break**

*Outside Weavers and Potters Rooms*

### **3:30 – 5:00 Session 5**

#### **GeoVisualization II. Session Chair: Sarah Battersby**

*Potters Room*

##### **3D Webcartographic Tools for Planetary Science Outreach**

Mátyás Gede and Henrik Hargitai

##### **Enriching The National Map Database for Multi-Scale Use: Introducing the VisibilityFilter Attribution**

Andrew J. Stauffer, Brittany L. Roche and Seth D. Webinger

##### **Map-nostics for Guiding Cartographic Exploration**

Sarah Battersby and Andrea Ballatore

### **3:30 – 5:00 Session 6**

#### **Analytical Cartography 1. Session Chair: Lawrence Stanislawski**

*Weavers Room*

##### **Real-Time Drainage Basin Modeling Using Concurrent Compute Shaders**

James E. Mower

##### **An Automated Spatial Flow Layout Algorithm using Triangulation, Approximate Steiner Tree and Path Smoothing**

Shipeng Sun

##### **An Open Source Solution to High Performance Processing for Extracting Surface Water Drainage Networks from Diverse Terrain Conditions**

Lawrence V. Stanislawski, Kornelijus Survila, Jeffrey Wendel, Yan Liu, and Barbara P. Battenfield

**5:00 – 6:00**

**US National Committee Meeting**

*Sandia Boardroom*

**6:00 – 8:30**

**Welcome Reception and Dinner**

*Franciscan Room*

**FRIDAY**

**9:00 – 10:00**

**Poster Session**

*Potters Room*

**ORANGE: Spatial Big Data Analysis and Visualization Platform.**

Sunghwan Cho, Sunghak Hong and Changsoo Lee

**Radar and Optical Mapping of Surge Persistence and Marsh Dieback Along the New Jersey Mid-Atlantic Coast after Hurricane Sandy**

Amina Rangoonwala and Elijah Ramsey III

**Structural Classification of Marshes with Polarimetric SAR Highlighting the Temporal Mapping of Marshes Exposed to Oil**

Elijah Ramsey III and Amina Rangoonwala

**2D or not 2D? Evaluating the Effect of Display Realism on Natural Resource Decision Making**

Steven S. Chong

**The Lands They Are A'Changing: Evaluating Change on a National Scale**

Kristina H Yamamoto, Andrew Stauffer and Kristin Fishburn,

**The Evolution of Land Use and Land Cover in Andijan between 1973 and 2013**

Sophie Turnbull-Appell

**10:00 – 10:30 Morning Break**

*Outside Weavers and Potters Rooms*

**10:30 – 12:00 Session 7**

**Analytical Cartography II: Session Chair: Michael DeMers**

*Potters Room*

**Spatio-Temporal Small Area Analysis for Improved Population Estimation Based on Advanced Dasymetric Refinement**

Hamidreza Zoraghein, Stefan Leyk, Barbara Buttenfield and Matt Ruther

**Cooperative Spatial Regionalization in a Distributed Memory**

Jason Laura and Sergio J. Rey

**Areal Differentiation Using Fuzzy Set Membership and Support Logic**

Michael N. DeMers

**10:30 – 12:00 Session 8**

*Weavers Room*

**Mobile and Online Mapping: Session Chair: Michael Peterson**

**Visualizing Distant Objects on Mobile Phones: Choice of Resizable Icons**

Jiayan Zhao and Rui Li

**Rapid 3D Modeling Using Photogrammetry Applied to Google Earth**

Jorge Chen and Keith C. Clarke

**Mapping GeoRSS Feeds and the Shift from KML to GeoJSON**

Michael P. Peterson

**12:00 – 2:00 Lunch: On Your Own**

**2:00 – 3:00 Session 9**

**Mapping Social Media. Session Chair: Mike Finn**

*Potters Room*

**Unlisted: Variations in Location Sharing by Craigslist Users**

Dara E. Seidl and Christopher Allen

**Dynamic Population Mapping Using Social Media Data (Twitter)**

Su Yeon Han and Ming-Hsiang Tsou

**2:00 – 3:00 Session 10**

**Spatial Data III. Session Chair: Eric Anderson**

*Weavers Room*

**Improving TIGER, Hidden Costs: The Uncertain Correspondence of 1990 and 2010 U.S. Census Geography**

Jonathan P. Schroeder

**MAF/TIGER® System, Horizontal Spatial Accuracy Assessments since 2000**

John Laidis

**3:00 – 3:30 Afternoon Break**

**3:30 – 5:00 Session 11**

**Mapping and Natural Hazards. Session Chair: Keith Clarke**

*Weavers Room*

**Mapping of the Vulnerability of Forest Resources due to Extreme Winter Storms in the State of Baden-Wurttemberg in Germany**

Syed Monjur Murshed and Eric Reed

**Developing a Parcel Level Natural Hazards Index: Charleston South Carolina a Case study**

Norman Levine and K. Eric Anderson

**Spatial, Temporal and Thematic Structure of VGI in Social Media Following Different Catastrophic Events**

Haiyun Ye and Keith Clarke