# 41st International Binghamton Geomorphology Symposium

# Geospatial Technologies & Geomorphological Mapping

October 15 to 17, 2010 - University of South Carolina - Columbia, SC **Tentative Program Schedule** (subject to revision)

## Friday, October 15th

11:30-12:30 Registration

12:30-5:00 Field trip to Congaree National Park led by John Kupfer and Kimberly Meitzen

6:30-10:00 pm Icebreaker & Registration in Top of Carolina, Capstone Building (revolving restaurant with overview of Columbia)

### Saturday, October 16

7:30-8:30 Continental Breakfast & Poster Setup

7:30-10:00 Registration and proceedings volume sales

#### 8:30-10:00 Session I - INTRODUCTIONS

8:30 - 8:40 Welcome to Columbia - Will Graf, Interim Associate Dean for Research, College of Arts and Sciences, USC

8:40 - 9:10 Convocation: Taking the Measure of a Landscape: Comparing a Simulated and Natural Landscape in the Virginia Coastal Plain - Alan D. Howard, University of Virginia.

9:10 - 9:40 Introduction: Geospatial Technologies and Digital Geomorphological

*Mapping: Concepts, Issues, and Research* - Michael P. Bishop, University of Nebraska, Omaha; <u>Allan James</u>, University South Carolina; <u>John F. Shroder</u>, University of Nebraska, Omaha; <u>Stephen Walsh</u>, University of North Carolina, Chapel Hill.

9:40 - 10:10 Coffee Break & Poster Session I

10:10-12:30 Session II - REMOTE SENSING, Methods and Technology

10:10 - 10:40 *Mapping Surface Mineralogy Using Imaging Spectrometry* - Fred A. Kruse, University of Nevada, Reno.

10:40 - 11:10 *Airborne and Terrestrial LiDAR Technology for Assessing Topography*, Michael Hodgson and John R. Jensen, *University South Carolina*.

11:10 - 11:40 *Microwave Remote Sensing*, Scott Hensley, Jet Propulsion Lab.

11:40 - 12:10 Landform Characterization Using Geophysics - Recent Advances, Applications, and Emerging Tools - Remke L. Van Dam, Michigan State University.

12:10 - 12:30 Discussion

12:30-1:30 Lunch (BGS Steering Committee Meeting)

1:30-3:30 Session III - REMOTE SENSING, Applications

1:30 - 2:00 **Making Riverscapes Real** - <u>Patrice Carbonneau</u>, University of Durham; <u>Mark A. Fonstad</u>, Texas State University, San Marcos; <u>W. Andrew Marcus</u>, University of Oregon; <u>Stephen. J. Dugdale</u>, APEM Ltd., Riverview, Embankment Business Park, Heaton Mersey, United Kingdom.

- 2:00 2:30 *High-Resolution Mapping and Modeling of Floodplains* <u>James Brasington</u>, *University of Aberystwyth, UK*.
- 2:30 3:00 Relationship between Satellite-Derived Snow Cover and Snowmelt-Runoff Timing and Stream Power in the Wind River Range, Wyoming Dorothy K. Hall, NASA; James L. Foster; Nicolo E. DiGirolamo; George A. Riggs
- 3:00 3:30 Coffee Break & Poster Session II
- 3:30 5:00 Session IV GEOGRAPHIC INFORMATION SCIENCE
  - 3:30 4:00 Geomorphometry and landform mapping: what is a landform? <u>Ian S. Evans</u>, Durham University, UK.
- 4:00 4:30 *Digital Terrain Modeling* <u>John Wilson</u>, *University of Southern California*.
  4:30 4:30 *Scientific Visualization of Landscape and Landforms* <u>Helena Mitasova</u>, *North Carolina State University*; Russell S. Harmon, U.S. Army Research Laboratory, Durham, NC; Katherine Weaver, *North Carolina State University*; Nathan Lyons, *North Carolina State University*; Margery F. Overton, *North Carolina State University*.

4:30 - 5:00 Discussion

7:00-9:00 pm **Banquet** 

Synchronization and Scale in Geomorphic Systems - <u>Jonathan D. Phillips</u>, University of Kentucky.

### Sunday, October 16th

8:00-9:00 Continental Breakfast & Poster Session III

#### 9:00-12:00 Session V - GEOGRAPHIC INFORMATION SCIENCE

- 9:00 9:30 Spatial Analysis and Mapping in Coastal Geomorphology Thomas R. Allen and Paul Gares; East Carolina University. George Oertel; Old Dominion University.
- 9:30 10:00 Soil Mapping and Modeling Jon Pelletier, University of Arizona.
- 10:00 10:30 GIS-based Hydrological Modeling and Mapping Lawrence Band, University of North Carolina, Chapel Hill.
- 10:30 11:00 The influence of mechanical properties on the link between tectonic and topographic evolution Peter O. Koons, University of Maine
- 11:00 11:30 Geomorphic Change Detection Using Historic Maps and DEMs: The Temporal Dimension of Geospatial Analysis L. Allan James, Michael Hodgson, Subhajit Ghoshal, and Mary Megison Latiolais, University of South Carolina.

11:30-12:00 - Discussion

12:00 Adjourn