

## **AAG 2010 - CALL FOR PAPERS**

### **SPECIAL SESSION(S): Modeling Geographic Complexity**

#### **LOCATION AND DATES**

Association of American Geographers Annual Meeting  
April 14-18, 2010, Washington, DC, USA

#### **SPONSORS**

Spatial Analysis and Modeling, Geographic Information Systems and Science, Human Dimensions of Global Change Specialty Groups of the AAG and the Geographical Information Science Group of the Royal Geographical Society.

#### **DESCRIPTION**

Understanding geographical systems represents one of the greatest challenges of our time. Complexity has emerged as a useful paradigm to effectively study linked human, socioeconomic and biophysical systems at a variety of different spatial and temporal scales. As a result, descriptive and predictive models of various levels of sophistication and using mostly agents, genetic algorithms, cellular automata and neural networks are now beginning to regularly appear in the geographic literature. However, there still remains many unresolved conceptual, technical and application challenges associated with these complexity based models. The goal of this session is to focus on the following themes:

1. Conceptual: shared and unique complexity signatures in geographic systems; existing and emerging geographical and complexity theories; epistemological and ontological influences; complexity based model designs; networks and hybrid models; linking classical and spatial statistics in complexity studies.
2. Technical: space-time patterns and dynamics; standardizing the development and representation of complex systems; rule selection and implementation; multiple-scale interactions and structure, system evolution and self-organization; learning and adaptation; calibration, validation and verification; path-dependence; non-linearity.
3. Applications: effectiveness of complexity models when embedded in political, institutional and socio-economic systems; human-environment interactions; earth systems science; land use science; landscape ecology; sustainability analysis.

In order to widely disseminate the ideas emerging from this session, the organizers of the session are exploring the possibility for a special issue of a journal and /or an edited book so that authors will have the opportunity to suitably revise their presentations for publication. Priority will be given for work that has not been published, in review or in press.

Please e-mail the abstract and key words with your expression of intent to Andrew Crooks <acrooks2@gmu.edu> by **October 19<sup>th</sup>, 2009**. Please make sure that your abstract conforms to the AAG guidelines in relation to title, word limit and key words and as specified at <<http://www.aag.org/annualmeetings/2010/papers.htm#instructions>>. An abstract should be no

more than 250 words that describes the presentation's purpose, methods, and conclusions as well as to include keywords. Full submissions will be given priority over submissions with just a paper title.

## **ORGANIZERS**

Arika Ligmann-Zielinska, Michigan State University <ligmannz@msu.edu >

Andrew Crooks, George Mason University <acrooks2@gmu.edu>

Alison Heppenstall, University of Leeds <A.J.Heppenstall@leeds.ac.uk>

Moira Zellner, University of Illinois at Chicago <mzellner@uic.edu>

Suzana Dragicevic, Simon Fraser University, <suzanad@sfu.ca>

## **TIMELINE:**

September 3<sup>rd</sup>, 2009: Call for papers.

October 19<sup>th</sup>, 2009: Abstract submission and expression of intent to session organizers. E-mail Andrew Crooks <acrooks2@gmu.edu> by this date if you are interested in being in this session. **Please submit an abstract and key words with your expression of intent.** Full submissions will be given priority over submissions with just a paper title.

October 22<sup>nd</sup>, 2009: Session finalization. Session organizers determine session order and content and notify authors.

October 26<sup>th</sup>, 2009: Final abstract submission to AAG, via [www.aag.org](http://www.aag.org). All participants must register individually via this site. Upon registration you will be given a participant number (PIN). Send the PIN and a copy of your final abstract to Andrew Crooks <acrooks2@gmu.edu>. Neither the organizers nor the AAG will edit the abstracts.

October 28<sup>th</sup>, 2009: AAG registration deadline. Sessions submitted to AAG for approval.

April 14<sup>th</sup> -18<sup>th</sup>, 2010: AAG meeting, Washington DC, USA