

# September 21-23 | 2016 Québec, Canada | 2016

The Second International Symposium on Cellular Automata Modeling for Urban and Spatial Systems (CAMUSS 2016) will be held in Quebec City, Canada from September 21<sup>st</sup> to September 23<sup>rd</sup>, 2016. CAMUSS 2016 is organized by the <u>Centre for Research in Geomatics</u> (CRG) and the <u>Convergence Network</u>, Université Laval, Canada, with the support of the Centre for Urban Policy Studies of the University of Manchester, UK.

CAMUSS 2016 will be a privileged forum of discussion about cellular automata (CA) and other geosimulation techniques, and their integration with GIS Sciences, Geography and Urban Studies, through the presentation of the advances in the state-of-the-art on these topics.

#### **CALL FOR PAPERS**

After a first edition in 2012, which successfully gathered a committed community of researchers in the field of cellular automata (CA), CAMUSS 2016 aims to consolidate the network that was initiated in 2012 as a privileged forum of discussion about CA and its integration with GIS Sciences, Geography and Urban Studies through the presentation of the advances in the state-of-the-art on CA. In this edition of the event, dedicated parallel sessions will also be organized focusing not only on CA but also on other geosimulation techniques such as agent-based simulation, artificial neural networks and discrete choice theory, among others.

The CAMUSS 2016 symposium consists of two refereed paper tracks: Full Papers and Extended Abstracts. Authors are invited to submit original research related to cellular automata (CA) and other geosimulation techniques (see below for detailed topics).

Please refer to the <u>CAMUSS website</u> for examples of relevant publications about cellular automata modeling in urban and spatial contexts.

## Organization

### **Chair of CAMUSS 2016 Organizing Committee**

Mir Abolfazl Mostafavi, Centre for Research in Geomatics, Université Laval, Canada

## **Co-Chair of CAMUSS 2016 Organizing Committee**

Nuno Norte Pinto, University of Manchester, UK

## **Local Organizing Committee**

Mir Abolfazl Mostafavi, Université Laval, Canada
Eveline Bernier, Centre for Research in Geomatics, Université Laval, Canada
Bernard Moulin, Université Laval, Canada
Sonia Rivest, Convergence Network, Université Laval, Canada
Hédia Sammari, Convergence Network, Université Laval, Canada

### **Steering Committee**

Michael Batty, CASA University College London, UK
Itzhak Benenson, Tel Aviv University, Israel
Geoffrey Caruso, University of Luxembourg, Luxembourg
Helen Couclelis, University of California at Santa Barbara, USA
Yan Liu, University of Queensland, Australia
Danielle Marceau, University of Calgary, Canada
Mir Abolfazl Mostafavi, Université Laval, Canada
Nuno Norte Pinto, University of Manchester, UK
Roger White, Memorial University Newfoundland, Canada

# **Symposium Topics**

CAMUSS 2016 invites authors to submit original research on topics including (but not limited to):

#### **Fundamental Research in Cellular Automata**

- Theoretical CA models
- Cells in CA
- Scale in CA
- Neighborhood in CA
- Transition rules in CA
- Calibration of CA models
- CA and complexity
- Integration of CA and GIS
- Integration of CA and remote sensing
- Integration of CA and agent-based modeling
- Integration of CA and supported vector machine algorithms

### Other geosimulation techniques

- Agent-based simulation
- Artificial neural networks
- Discrete choice theory
- Advances in geosimulation modeling

## **Applications**

CA/geosimulation:

- for land use/land cover modeling
- for transport modeling
- for demography modeling
- for health and epidemiology modeling
- for hydrology modeling
- for fire modeling
- and social sciences
- of urban processes
- in defence and security
- of natural disasters
- and energy networks
- in environment

Other Applications of CA and geosimulation for modeling spatial systems

## **Important Dates**

Full papers due March 4<sup>th</sup>, 2016

- Full paper notification April 4<sup>th</sup>, 2016
- Full paper camera-ready due April 18<sup>th</sup>, 2016
- Extended abstracts due May 23<sup>rd</sup>, 2016
- Extended abstracts notification June 13<sup>th</sup>, 2016
- Extended abstracts camera-ready due June 25<sup>th</sup>, 2016

# **Full Paper Track**

Full papers must be submitted in PDF format through the <u>Easychair website</u>. Full papers will be thoroughly reviewed by three members of the program committee. High-quality submissions will be accepted for presentation at the symposium and for publication in the proceedings (in a book of the <u>Advances in Geographic Information Science Springer Book Series</u>). Manuscripts must describe original work that has neither been published before, nor is currently under review elsewhere. Papers must be written in English according to Springer general <u>Manuscript guidelines</u> and should not exceed 5,000 words.

- Full papers due March 4<sup>th</sup>, 2016
- Full paper notification April 4<sup>th</sup>, 2016
- Full paper camera-ready due **April 18**<sup>th</sup>, **2016**

#### **Extended Abstract Track**

Extended abstracts must be submitted in PDF format through the <u>Easychair website</u>. Extended abstracts describing work in progress will be reviewed by three members of the program committee. Accepted extended abstracts will be selected for oral or poster presentation and will be published in electronic format as proceedings of the symposium. Extended abstracts must be written in English according to the symposium <u>guidelines</u> and should not exceed 1,500 words.

- Extended abstracts due May 23<sup>rd</sup>, 2016
- Extended abstracts notification June 13<sup>th</sup>, 2016
- Extended abstracts camera-ready due June 25<sup>th</sup>, 2016