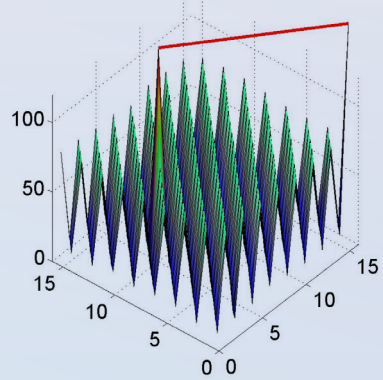
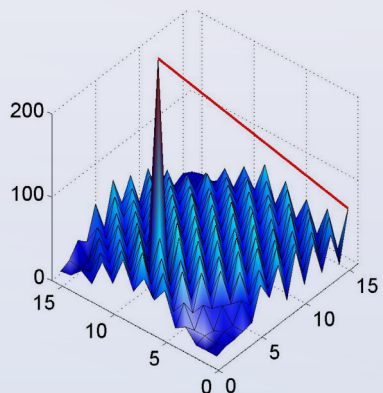
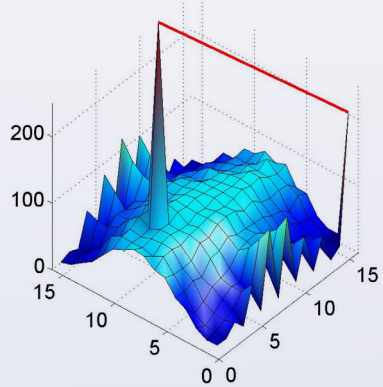


2015 SUMMER SOLSTICE 7th International Conference on Discrete Models of Complex Systems

June 17 - 19, 2015 • Toronto, Ontario, Canada



Complex systems are pervasive in many fields of science and we encounter them everyday and everywhere in our life. The key feature of a complex system is that it is composed of large number of interconnected and interacting entities exhibiting much richer dynamical properties on global scale than they could be inferred from the properties and behaviours of its individual entities.

Complex systems are studied in many areas of natural sciences, social sciences, engineering and mathematical sciences. Discrete modeling in terms of cellular automata, lattice gas cellular automata, multi-agent based models, or networks represent the integral part of these interdisciplinary studies. These models can be seen as the simplest digital laboratories to study phenomena exhibited by complex systems like self-organization processes, pattern formation, cooperation, adaptation, competition, attractors, or multi-scale phenomena.

The objective of the 2015 Summer Solstice Conference is to provide a forum for exchange of ideas, presentation of results of current research and for discussion of potential future directions and developments in the field of discrete modeling of complex systems and analysis of their dynamics from methodological and phenomenological point of view. The conference will cover both theoretical and applied research and topics will include, but will not be limited to, the following:

- Challenges, benefits and theory of modeling and simulation of complex systems using cellular automata, lattice gas cellular automata, multi-agent based models, complex networks
- Discrete models in biology and medicine
- Discrete models in economy and social sciences
- Discrete models of man made complex systems from nanotechnology to information networks
- Tools of analysis of dynamics and multiscale phenomena of discrete models of complex systems

There will be sessions of contributed presentations and open access Post Conference Proceedings are planned.

May 25, 2015 - abstract submission deadline • **May 17, 2015** - application deadline for financial support

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Invited Speakers

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Jan Baetens, Ghent University, Belgium
Franco Bagnoli, University of Florence, Italy
Andreas Deutsch, Technical University of Dresden, Germany
Stanislaw Drozd, Polish Academy of Sciences, Cracow, Poland
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Images: Distribution of queue sizes in a model of data network, A. T. Lawniczak

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www.fields.utoronto.ca/programs/scientific/14-15/complexsys15

