CALL FOR PAPERS ACA 2016

ACA 2016 (satellite of ACRI 2016)

Fourth International Workshop on Asynchronous Cellular Automata and Asynchronous Discrete Models at 12th International Conference on Cellular Automata for Research and Industry (ACRI 2016)

Fez, Morocco, September 5-8, 2016

ATMS

Cellular Automata are a well-known formal tool for modeling complex systems; they are found in many scientific fields and industrial applications. Synchronicity is one of the main features of Cellular Automata evolutions. Indeed, in the most common Cellular Automata framework, all cells are updated simultaneously at each discrete time step.

Recent trends consider the modeling of asynchronous systems based on local interactions. The aim of this workshop is to bring together researchers dealing with the theme of the asyncronicity inside Cellular Automata and other Discrete Models such as discrete Multi-Agents Systems, Boolean Networks, and so on, in order to foster their interaction and to provide a forum for presenting new ideas and works in progress on the subject.

Topics include, but are not limited to the following aspects of Asynchronous Cellular Automata and Asynchronous Discrete Models (such as Multi-Agents Systems, Boolean Networks and so on):

- dynamics of asynchronous systems
- complexity issues
- computational issues
- emergent properties
- models of parallelism and distributed systems
- models of phenomena from biology, chemistry, physics, engineering and other fields
- applications of asynchronous automata (genetic regulation networks, network coding, load balancing, etc)

Both theoretical and applicative contributions are most welcome.

SUBMISSIONS AND PUBLICATIONS

Authors are invited to submit papers according to two contribution categories -- full and short papers -- meant to provide a differentiation of the papers in terms of their length, depth and/or maturity. Papers must comply with the Springer-Verlag format and the maximum length of 5 and 10 pages for short and full contributions, respectively.

Details on the electronic submission procedure will be provided through the website http://acri2016.univ-perp.fr

Accepted papers will be published by Springer-Verlag in the Lecture Notes in Computer Science (LNCS) series.

JOURNAL SPECIAL ISSUE

It is also planned that selected papers will be considered for publication in Special Issues of an international journal (Natural Computing). They will contain refereed extended versions of selected papers presented at the ACA workshop.

PROGRAM COMMITTEE

LuÃs Correia - Lisbon University, Portugal
Alberto Dennunzio (Chair) - Milano-Bicocca University, Italy
Nazim Fates (Chair) - INRIA Nancy-Grand Est, France
Enrico Formenti (Chair) - Nice Sophia Antipolis University, France
Henryk FukÅ > - Brock University, Canada
Maximilien Gadouleau - University of Durham, United Kingdom
Eric Goles - Adolfo Ibanez University, Chile
Adrien Richard - CNRS and Nice Sophia Antipolis University, France
Thomas Worsch - University of Karlsruhe, Germany

IMPORTANT DATES:

Paper submission: April 10th, 2016 Notification of paper acceptance or rejection: May 10th, 2016 Final version of the paper for the proceedings: June 6th, 2016 Registration deadline: June 27th 2016