

11th International Conference on Cellular Automata for Research and Industry

# Kraków (Poland), September 22 - 25, 2014

http://www.acri2014.agh.edu.pl

# **Call for Papers**

#### **AIMS & SCOPE**

Cellular Automata (CA) present a very powerful approach to the study of spatio-temporal systems where complex phenomena build up out of many simple local interactions. The main goal of the 11th edition of ACRI 2014 Conference (Cellular Automata for Research and Industry) is to offer both scientists and engineers in academies and industries an opportunity to express and discuss their views on current trends, challenges, and state-of-the art solutions to various problems in the fields of arts, biology, chemistry, communication, cultural heritage, ecology, economy, geology, engineering, medicine, physics, sociology, traffic control, etc.

The conference, which is organized by the AGH University of Science and Technology in Kraków and which will take place in Kraków on September 22-25, 2014, is the eleventh in a series of conferences inaugurated in 1994 in Rende, Italy, and followed by ACRI 1996 in Milan, Italy, ACRI 1998 in Trieste, Italy, ACRI 2000 in Karlsruhe, Germany, ACRI 2002 in Geneva, Switzerland, ACRI 2004 in Amsterdam, The Netherlands, ACRI 2006 in Perpignan, France, ACRI 2008 in Yokohama, Japan, ACRI 2010 in Ascoli Piceno, Italy and ACRI 2012 in Santorini, Grece.

Topics of either theoretical or applied interest about CA and CA-based models and systems include but are not limited to:

- Algebraic properties and generalization
- Complex systems
- Computational complexity
- Dynamical systems
- Hardware circuits, architectures, systems and applications
- Modeling of biological systems
- Modeling of physical or chemical systems
- Modeling of ecological and environmental systems
- Image Processing and pattern recognition
- Natural Computing
- Quantum Cellular Automata
- Parallelism

#### SUBMISSIONS AND PUBLICATION

Authors are invited to submit papers according to two contribution categories full and short papers depending on 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. Formatting style files and further guidelines for formatting can be found at <a href="http://www.acri2014.agh.edu.pl/doku.php?id=submission">http://www.acri2014.agh.edu.pl/doku.php?id=submission</a>.

The submission system is now open and early submissions are welcome. Please prepare your submission in accordance with the rules described above and submit a pdf file via

https://www.easychair.org/conferences/?conf=acri2014

Accepted papers will be published by Springer-Verlag in a volume of the Lecture

Notes in Computer Science (LNCS) series. This volume will be available by the time of the workshop.

A selection of papers that will be presented during the workshop will be published on a

special issue of Journal of Cellular Automata (JCR list) (http://www.oldcitypublishing.com/JCA/JCA.html).

### **IMPORTANT DATES**

Paper submission: April 7, 2014 (extended!)

Notification of paper acceptance or rejection: May 15, 2014 Final version of the paper for the proceedings: June 8, 2014

#### KRAKÓW

Kraków is one of the places in the world which have been included in the UNESCO World Cultural Heritage list. Since the Middle Ages Kraków had been the capital of the Polish state until the 17th century and has kept the character of a spiritual capital till the present day.

The architectural complex of the Old Town has survived all the cataclysms of the past and preserved the same, unchanged layout since the Middle Ages. The Old Town together with the Wieliczka Salt Mine have been recognized as some of the most valuable architectural treasures of the world. There are over 300 town-houses and 58 churches and palaces, all considered historical monuments just within the old center of Kraków and that is just a small part of all the monuments of this city.

### **CONFERENCE CHAIRS**

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