Non-Classical Models of Automata and Applications

Preface

———————————————————

Many non-classical automata models are natural objects of theoretical computer science. They are studied from different points of view in various areas, both as theoretical concepts and as formal models for applications. A deeper and interdisciplinary coverage of this particular area may gain new insights and substantial progress. Accordingly, we organized the workshop *Non-Classical Models of Automata and Applications* (NCMA 2009) in order to bring together researchers working on different aspects of non-classical automata models.

The workshop took place in Wrocław, Poland, on August 31–September 1, 2009. It was organized as a satellite event of the International Symposium on Fundamentals of Computation Theory (FCT). NCMA 2009 was sponsored by the AutoMathA project of the European Science Foundation (ESF). It was a scientifically valuable event with very interesting discussions and has stimulated new investigations and scientific co-operations in the field of (non-classical) models of automata and applications. Special thanks go to the invited speakers Hendrik J. Hoogeboom (Leiden University, The Netherlands), Joachim Niehren (INRIA Lille Nord Europe, France), and Klaus Sutner (Carnegie Mellon University, USA) for accepting our invitation and presenting their recent results at NCMA 2009.

In addition to the invited contributions, 17 papers were submitted by a total of 34 authors from 12 different countries. From these submissions, on the basis of three referee reports each, the Program Committee selected 14 papers. We thank the members of the Program Committee for their excellent work in making this selection: Henning Bordihn (Universität Potsdam, Germany), Rudolf Freund (Technische Universität Wien, Austria), Mika Hirvensalo (University of Turku, Finland), Markus Holzer (Universität Giessen, Germany), Johanna Högberg (Umeå University, Sweden), Tomasz Jurdziński (Wrocław University, Poland), Martin Kutrib (Universität Giessen, Germany), Maurice Margenstern (Université de Metz, France), Carlo Mereghetti (Università degli Studi di Milano, Italy), Friedrich Otto (Universität Kassel, Germany), Hiroshi Umeo (Osaka Electro-Communication University, Japan), and Kai Salomaa (Queen's University, Canada).

We are very grateful to Miroslaw Kutyłowski, Małgorzata Januszkiewicz, and Małgorzata Korzeniowska from the Wrocław University of Technology for their support in the local organization of NCMA 2009, and to Marian Kogler for his assistance with editing the proceedings which appeared as volume 256 at the series "books@ocg.at" of the Austrian Computer Society.

The authors of selected papers were invited to submit substantially enhanced versions of their papers to this special issue, each paper was reviewed and if necessary revised by the authors. We are grateful to all the authors for their contributions and the referees for their vision and efforts. We would also like to express our thanks to Damian Niwinski, the editor-in-chief of the journal, for his support to realize this special issue.

<div align="center">

Special issue editors

</div>

Henning Bordihn, Potsdam
henning@cs.uni-potsdam.de

Rudolf Freund, Vienna
rudi@emcc.at

Mika Hirvensalo, Turku
mikhirve@utu.fi

Markus Holzer, Giessen
holzer@informatik.uni-giessen.de

Martin Kutrib, Giessen
kutrib@informatik.uni-giessen.de

Friedrich Otto, Kassel
otto@theory.informatik.uni-kassel.de