Non-Classical Models of Automata and Applications II

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 lead to new insights and substantial progress. The Second Workshop on Non-Classical Models of Automata and Applications (NCMA 2010) has been organized in order to bring together researchers working on different aspects of various variants of non-classical automata models to exchange and develop novel ideas.

The first Workshop on Non-Classical Models of Automata and Applications had taken place in Wrocław, Poland, organized as a satellite event of the International Symposium on Fundamentals of Computation Theory (FCT), on August 31st and September 1st, 2009. The Second Workshop on Non-Classical Models of Automata and Applications (NCMA 2010) took place in Jena, Germany, as a satellite event of the Eleventh International Conference on Membrane Computing (CMC 11), on August 23rd and 24th, 2010. The second workshop again was a scientifically valuable event with very interesting discussions, stimulating new investigations and scientific co-operations in the field of (non-classical) models of automata and applications.

NCMA 2010 was sponsored by the DFG (Deutsche Forschungsgemeinschaft) and partially also supported by the Institute of Computer Languages of the Vienna University of Technology. Special thanks go to the invited speakers Tomasz Jurdziński (University of Wrocław, Poland) and Andreas Maletti (Universität Stuttgart, Germany) for accepting our invitation and presenting their recent results at NCMA 2010 in Jena.

In addition to the invited contributions, papers were submitted by a total of 29 authors from 9 different countries. From these submissions, on the basis of three referee reports each, the Program Committee selected 11 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), Thomas Hinze (Universität Jena, Germany), Mika Hirvensalo (University of Turku, Finland), Markus Holzer (Universität Giessen, Germany), Martin Kutrib (Universität Giessen, Germany), František Mráz (Charles University Prague, Czech Republic), Alexander Okhotin (University of Turku, Finland), Friedrich Otto (Universität Kassel, Germany), Beatrice Palano (Università degli Studi di Milano, Italy),
Daniel Reidenbach (Loughborough University, UK), Kai Salomaa (Queen’s University, Canada), György Vaszil (Hungarian Academy of Sciences, Budapest, Hungary), Sergey Verlan (Université Paris Est, France), and Sheng Yu (University of Western Ontario, Canada).

We are very grateful to Thomas Hinze and his team from the University of Jena for their support in the local organization of NCMA 2010 and to Marion Oswald (Hungarian Academy of Sciences, Budapest, Hungary, and Technische Universität Wien, Austria) for her assistance with editing the Proceedings which appeared as volume 263 in 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 all the referees for their reports 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.

**Special issue editors**

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