

Preface

The second international workshop on *Computational Models for Cell Processes* (ComProc 2009) took place on November 3, 2009 at the Eindhoven University of Technology, in conjunction with *Formal Methods 2009*. The first edition of the workshop (2008) took place in Turku, Finland, in conjunction with *Formal Methods 2008*. This volume contains the final versions of all contributions accepted for presentation at the workshop.

The goal of the CompMod workshop series is to bring together researchers in computer science (especially in formal methods) and mathematics (both discrete and continuous), interested in the opportunities and the challenges of systems biology. CompMod 2009 has received 19 submissions, authored by 60 different authors from 7 countries. Most authors came from Italy (26), UK (11), and the Netherlands (11). The Program Committee has selected 8 papers for presentation at the workshop. We thank the PC members for their excellent work in making this selection. The CompMod 2009 Program Committee consisted of:

- Ralph-Johan Back (Åbo Akademi University, Finland) Co-Chair
- Lubos Brim (Masaryk University, Czech Republic)
- Muffy Calder (University of Glasgow, UK)
- Eugen Czeizler (Åbo Akademi University, Finland)
- Vincent Danos (University of Edinburgh, UK)
- Russ Harmer (University of Paris 7, France)
- Monika Heiner (Brandenburg University of Technology Cottbus, Germany)
- Jane Hillston (University of Edinburgh, UK)
- Ina Koch (Max Planck Institute for Molecular Genetics, Germany)
- Vincenzo Manca (Universita di Verona, Italy)
- Giancarlo Mauri (Universita Degli Studi di Milano-Bicocca, Italy)
- Satoru Miyano (University of Tokyo, Japan)
- Andrei Păun (Louisiana Tech University, US)
- Ion Petre (Åbo Akademi University, Finland) Co-Chair
- Jaco van de Pol (University of Twente, the Netherlands)
- Alberto Policriti (Universita di Udine, Italy)
- Erik de Vink (Eindhoven University of Technology, the Netherlands) Co-Chair

The scientific program of the workshop spans an interesting mix of approaches to systems biology, ranging from quantitative to qualitative techniques, from continuous to discrete mathematics, and from deterministic to stochastic methods. We thank our three invited speakers

- Jasmin Fisher (Microsoft Research Cambridge, UK)

- Hidde de Jong (INRIA Grenoble-Rhone-Alpes, France)
- Grzegorz Rozenberg (Leiden, the Netherlands; Boulder, Colorado, US)

for accepting our invitation and for presenting some of their recent results at CompMod 2009.

Similarly as last year, a special issue of *LNBI Transactions on Computational Systems Biology* (Springer) will be based on CompMod 2009. The forthcoming special issue will have a separate, open call for papers in early 2010 and all submissions will be subject to a separate review process.

This edition of CompMod was jointly organized with the *EC-MOAN* project. We have organized a special session of the workshop dedicated to the project, where a brief overview of *EC-MOAN* was presented, together with the invited talk by Hidde de Jong (a member of the project), and a contributed paper by members of *EC-MOAN*. We are grateful to Jaco van de Pol and to Lubos Brim for agreeing to collaborate with us on the workshop. We also thank FME for their financial support.

We would also like to thank the editorial board of the *Electronic Proceedings in Theoretical Computer Science* (EPTCS) for accepting to publish these proceedings in their series.

*Ralph-Johan Back, Ion Petre, Erik de Vink
Turku, Finland and Eindhoven, the Netherlands, October 2009
Workshop organizers and PC co-chairs*