

Preface

This volume contains the papers presented at CMSB 2016, the 14th Conference on Computational Methods in Systems Biology, held on September 21–23, 2016 at the Computer Laboratory, University of Cambridge (UK).

The CMSB annual conference series, initiated in 2003, provides a unique forum of discussion for computer scientists, biologists, mathematicians, engineers, and physicists interested in a system-level understanding of biological processes. Topics of interest include formalisms for modelling biological processes; models and their biological applications; frameworks for model verification, validation, analysis, and simulation of biological systems; high-performance computational systems biology and parallel implementations; model inference from experimental data; model integration from biological databases; multi-scale modelling and analysis methods; and computational approaches for synthetic biology. Case studies in systems and synthetic biology are especially encouraged.

There were 37 regular submissions, 3 tools papers, and 9 poster submissions. Each regular submission and tool paper submission was reviewed by at least 4 Program Committee members. The committee decided to accept 17 regular papers, 3 tool papers, and all submitted posters. On average, regular and tool papers received 4.2 reviews each, while each poster submissions received 2 reviews. To complement the contributed papers, we also included in the program four invited lectures: Luca Cardelli (Microsoft Research, UK), Joëlle Despeyroux (Inria Sophia Antipolis, France), Radu Grosu (TU Wien, Austria), and Jane Hillston (University of Edinburgh, UK).

As program co-chairs, we have many people to thank. We are extremely grateful to the members of the Program Committee and the external reviewers for their peer reviews and the valuable feedback they provided to the authors. We thank also the authors of the accepted papers for revising the papers according to the suggestions of the program committee and for their responsiveness on providing the camera-ready copies within the deadline. Our special thanks goes to François Fages and all the members of the CMSB Steering Committee for their advice on organizing and running the conference. We acknowledge the support of the EasyChair conference system during the reviewing process and the production of these proceedings. We thank Kaushik Chowdhury and the IEEE Computer Society Technical Committee on Simulation for supporting the best student paper award and the best poster award. We thank NVIDIA for providing their equipment as the best paper award. Our gratitude also goes to the tool track chair, Claudio Angione, and the local organization chair, Max Conway, for their help, support, and spirited participation before, during, and after the conference. We are also really grateful to Paolo Zuliani for having organized a minisymposium on *Automated Reasoning for Systems Biology*, which was held a day before the conference. It is our pleasant duty to acknowledge the financial support from our sponsor, Microsoft Research, and the support of the Computer Laboratory at the University of Cambridge, where this year's event was hosted. Finally, we would like to

thank all the participants of the conference. It was the quality of their presentations and their contribution to the discussions that made the meeting a scientific success.

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