

Preface

This volume contains the papers presented at RC 2016, the 8th Conference on Reversible Computation, held during July 7–8, 2016, in Bologna (Italy), hosted by the Computer Science Department of the University of Bologna.

The Conference on Reversible Computation brings together researchers from computer science, mathematics, engineering, and physics to discuss new developments and directions for future research in the emerging area of reversible computation. This includes, e.g., reversible formal models, reversible programming languages, reversible circuits, and quantum computing.

The conference received 38 submissions by authors from 22 countries. All papers were reviewed by at least three members of the Program Committee. After careful deliberations, the Program Committee selected 23 papers for presentation. In addition to these papers, this volume contains the abstracts of the two invited talks: “DEMONIC Programming: A Computational Language for Single-Particle Equilibrium Thermodynamics, and Its Formal Semantics” by Samson Abramsky (University of Oxford, UK) and “Classical Problems to Make Quantum Computing a Reality” by Adam Whiteside (University of Melbourne, Australia and Google).

The conference would not have been possible without the enthusiasm of the members of the Program Committee; their professionalism and their helpfulness were exemplary. For the work of the Program Committee and the compilation of the proceedings, the EasyChair system was employed, which was extremely useful. Finally, we would like to thank all the authors for their submissions, their willingness to continue improving their papers, and their presentations!

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