Preface

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This volume contains the proceedings of the *Fourth International Symposium on Games, Automata, Logic and Formal Verification* (GandALF 2014). The symposium took place in Verona, Italy, from 10th to 12th of September 2014.

The GandALF symposium was established by a number of Italian computer scientists interested in mathematical logic, automata theory, game theory, and their applications to the specification, design, and verification of complex systems. It aims to provide a forum where people from different areas, and possibly with different backgrounds, can fruitfully interact. Even though the idea of the symposium emerged within the Italian research community, the event has a truly international nature, as witnessed by the composition of the conference committees and by the country distribution of the submitted papers.

In response to the Call for Papers, the program committee received 36 submissions and selected 19 of them to be included in the conference program. Each paper was revised by at least three referees and the selection was based on originality, quality, and relevance to the topics of the symposium. The scientific program consisted of papers on a wide variety of topics, including algorithmic and behavioral game theory, game semantics, formal languages and automata theory, modal and temporal logics, software verification, hybrid systems.

This fifth edition of GandALF, colocated with TIME 2014, has also hosted three invited talks:

- *Advances in symbolic model checking for multi-agent systems*, by Alessio R. Lomuscio (Imperial College London, UK)

- *Termination of Linear Programs: Advances and Challenges*, by Joel Ouaknine (University of Oxford, UK)

- *Schema mappings and data examples: An interplay between syntax and semantics*, by Phokion Kolaitis (University of California Santa Cruz, USA and IBM Research Almaden, USA)

We wish to express our thanks to the authors who submitted extended abstracts for consideration. We would like to thank also the steering committee for giving us the opportunity and the honor to supervise GandALF 2014, as well as the program committee members and the additional reviewers for their excellent work, fruitful discussions and active participation during the evaluation process.

We would like to thank the people, institutions, and companies for contributing to the success of this edition of GandALF. In particular, we gratefully acknowledge the financial support from INDAM-GNCS (Istituto Nazionale di Alta Matematica - Gruppo Nazionale per il Calcolo Scientifico). We also thank the EasyChair organization for supporting all the tasks related to the selection of contributions, EPTCS and arXiv for hosting the proceedings.

We would like to extend special thanks to the organizing committe – composed by Barbara Oliboni, Carlo Combi, Gabriele Pozzani, and Pietro Sala – for their efforts in making the local arrangements and organizing an attractive social program. We are also grateful to Aniello Murano for helping us in advertising the event.

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