

Preface

This volume contains the proceedings of the 16th International Conference on Relational and Algebraic Methods in Computer Science (RAMiCS 2017), which was held at ENS Lyon, France, from May 15 to May 18, 2017.

The RAMiCS conferences aim to bring a community of researchers together to advance the development and dissemination of relation algebras, Kleene algebras and similar algebraic formalisms. Topics covered range from mathematical foundations to applications as conceptual and methodological tools in computer science and beyond. More than twenty-five years after its foundation in 1991 in Warsaw, Poland—initially as *Relational Methods in Computer Science*—RAMiCS remains a main venue in this field. The series merged with the workshops on Applications of Kleene Algebra in 2003 and adopted its current name in 2009. Previous events were organised in Dagstuhl, Germany (1994), Paraty, Brasil (1995), Hammamet, Tunisia (1997), Warsaw, Poland (1998), Québec, Canada (2000), Oisterwijk, the Netherlands (2001), Malente, Germany (2003), St. Catharines, Canada (2005), Manchester, United Kingdom (2006), Frauenwörth, Germany (2008), Doha, Qatar (2009), Rotterdam, the Netherlands (2011), Cambridge, United Kingdom (2012), Marienstatt, Germany (2014) and Braga, Portugal (2015).

RAMiCS 2017 attracted 32 submissions, of which 17 were selected for presentation by the Programme Committee. Each submission was evaluated according to high academic standards by at least three independent reviewers, and scrutinised further during two weeks of intense electronic discussion. The organisers are very grateful to all Programme Committee members for this hard work, including the lively and constructive debates, to the external reviewers for their generous help and expert judgments, and especially to Wolfram Kahl, Martin E. Müller and Michael Winter for shepherding three submissions towards acceptance. Without this dedication we could not have assembled such a high-quality programme; and we hope that all authors have benefitted from these efforts.

Apart from the submitted articles, this volume features the contributions of three invited speakers. The article on an *Algebra for Quantitative Information Flow* by Annabelle McIver and her co-authors presents a new model for reasoning about confidentiality in security applications. Jean-Éric Pin's paper on the *Dual Space of a Lattice as the Completion of a Pervin Space* introduces Pervin spaces as useful tools for computing dual spaces of lattices, with applications in language theory. Alexandra Silva has contributed an abstract on her talk on *A (Co)Algebraic Theory of Succinct Acceptors*. We are delighted that all three invited speakers have accepted our invitation to present their work at the conference.

Last, but not least, we would like to thank the members of the RAMiCS Steering Committee for their support and advice. We gratefully acknowledge financial support by the Laboratoire de l'Informatique du Parallélisme (LIP), the Ecole Normale Supérieure de Lyon (ENS de Lyon) and the Laboratoire d'excellence en mathématique et informatique fondamentale (Labex MILYON) of the Uni-

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May 2017

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