

PREFACE

The complexity of descriptions of computing objects and computations is the main investigation subject of *descriptive complexity*, that includes a large number of traditional areas of computer science.

Due to the wide interest and research activities in this field, in 1997, the International Federation for Information Processing (IFIP) founded the

Working Group 1.02 (WG 1.02) on Descriptive Complexity,

and since, this group promotes a series of workshops related to this field.

The International Conference on Descriptive Complexity of Formal Systems is a continuation of the former Workshop on Descriptive Complexity of Formal Systems, which was a merger of two other workshops: FDSR – Formal Descriptions and Software Reliability – and DCAGRS – Descriptive Complexity of Automata, Grammars and Related Structures. DCAGRS was previously held in Magdeburg, Germany (1999), London, Canada (2000) and Vienna, Austria (2001), while FDSR was previously held in Paderborn, Germany (1998), Boca Raton, USA (1999) and San José, USA (2000). Since 2002, DCFS was successively held in

London, Canada (2002)	Magdeburg, Germany (2009)
Budapest, Hungary (2003)	Saskatoon, Canada (2010)
London, Canada (2004)	Gießen/Limburg, Germany (2011)
Como, Italy (2005)	Braga, Portugal (2012)
Las Cruces, USA (2006)	London, Canada (2013)
Nový Smokovec, Slovakia (2007)	Turku, Finland (2014)
Charlottetown, Canada (2008)	Waterloo, Canada (2015)

All the previous DCAGRS, FDSR, and DCFS workshops had been jointly organized by the Working Group 1.02 on Descriptive Complexity of the International Federation for Information Processing (IFIP) and the hosting institutions. In 2016, the 18th International Conference on Descriptive Complexity of Formal Systems (DCFS 2016) took place in Bucharest, Romania, July 6–8. The workshop was jointly organized by the Faculty of Mathematics and Computer Science of the University of Bucharest and by the IFIP WG 1.02. More information can be found on the conference website: <http://fmi.unibuc.ro/dcfs2016/>.

After a careful refereeing process, four invited papers and 13 submitted papers were presented at DCFS 2016.

This volume includes 8 papers (selected among the 13 accepted papers), in revised and extended form, after a standard refereeing process.

We would kindly thank the members of the Program Committee for their contribution to the reviewing and selection process:

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Co-chairs of the Workshop, Guest Editors

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