

Preface

This volume contains the proceedings of ICGT 2016, the 9th International Conference on Graph Transformation. The conference was held in Vienna, Austria, during July 5–6, 2016. ICGT 2016 took place under the auspices of the European Association of Theoretical Computer Science (EATCS), the European Association of Software Science and Technology (EASST), and the IFIP Working Group 1.3, Foundations of Systems Specification. It was affiliated with STAF (Software Technologies: Applications and Foundations), a federation of leading conferences on software technologies.

The aim of the ICGT series¹ is to bring together researchers from different areas interested in all aspects of graph transformation. Graph structures are used almost everywhere when representing or modeling data and systems, not only in applied and theoretical computer science, but also in, e.g., natural and engineering sciences. Graph transformation and graph grammars are the fundamental modeling paradigms for describing, formalizing, and analyzing graphs that change over time when modeling, e.g., dynamic data structures, systems, or models. The conference series promotes the cross-fertilizing exchange of novel ideas, new results, and experiences in this context among researchers and students from different communities.

ICGT 2016 continued the series of conferences previously held in Barcelona (Spain) in 2002, Rome (Italy) in 2004, Natal (Brazil) in 2006, Leicester (UK) in 2008, Enschede (The Netherlands) in 2010, Bremen (Germany) in 2012, York (UK) in 2014, and L'Aquila (Italy) in 2015 following a series of six International Workshops on Graph Grammars and Their Application to Computer Science from 1978 to 1998 in Europe and in the USA.

This year, the conference solicited research papers that describe new unpublished contributions in the theory and applications of graph transformation, innovative case studies describing the use of graph-rewriting techniques in any application domain, and tool presentation papers that demonstrate the main features and functionalities of graph-based tools. All papers were reviewed thoroughly by at least three Program Committee members and additional reviewers. The Program Committee selected 14 papers for publication in these proceedings with an acceptance rate of 42 %. The topics of the accepted papers range over a wide spectrum, including theoretical approaches to graph transformation and their verification, analyses and compilation methods, graph queries, visual methods as well as various applications. In addition to these paper presentations, the conference program included an invited talk, given by Juergen Dingel (Queen's University, Ontario, Canada).

We would like to thank all who contributed to the success of ICGT 2016, the invited speaker Juergen Dingel, the authors of all submitted papers, as well as the members of the Program Committee and the additional reviewers for their valuable contributions

¹ www.graph-transformation.org.

to the selection process. We are grateful to the TU Wien and the STAF federation of conferences for hosting ICGT 2016.

Special thanks go to Barbara König, the organizer of the 7th International Workshop on Graph Computation Models (GCM 2016), a satellite workshop related to ICGT 2016 and affiliated with the STAF federation of conferences.

We also would like to acknowledge the excellent support throughout the publishing process by Alfred Hofmann and his team at Springer, in particular for the complimentary printed copies of these proceedings, which were distributed at the meeting, and the helpful use of the EasyChair conference management system.

During the preparation of the conference, we were saddened by the death of Hartmut Ehrig, one of the fathers and most productive members of the graph transformation community and co-founder of this conference series. We dedicate this volume to him. An obituary, by Hans-Jörg Kreowski, is included in these proceedings.

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Graph Transformation

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