

# Preface

This volume contains the post-proceedings of the 8th International Workshop on Computing with Terms and Graphs (TERMGRAPH 2014). The workshop took place in Vienna on July 13, 2014 and was affiliated with the joint RTA and TLCA conference, which was part of the Federated Logic Conference (FLoC), which in turn participated in the Vienna Summer of Logic (VSL) 2014.

Research in term and graph rewriting ranges from theoretical questions to practical issues. Computing with graphs handles the sharing of common subexpressions in a natural and seamless way, and improves the efficiency of computations in space and time. Sharing is ubiquitous in several research areas, for instance: the modelling of first- and higher-order term rewriting by (acyclic or cyclic) graph rewriting, the modelling of biological or chemical abstract machines, the implementation techniques of programming languages: many implementations of functional, logic, object-oriented, concurrent and mobile calculi are based on term graphs. Term graphs are also used in automated theorem proving and symbolic computation systems working on shared structures. The aim of this workshop is to bring together researchers working in different domains on term and graph transformation and to foster their interaction, to provide a forum for presenting new ideas and work in progress, and to enable newcomers to learn about current activities in term graph rewriting.

Previous editions of the workshop took place in Barcelona (2002), Rome (2004), Vienna (2006), Braga (2007), York (2009), Saarbrücken (2011), and Rome (2013).

The four regular papers in these proceedings are significantly extended versions of their pre-proceedings version. They were subjected to an additional round of reviewing. The paper by Samuel Mimram is an invited contribution.

We would like to thank all who contributed to the success of TERMGRAPH 2014, especially the program committee and the external reviewers for their valuable contributions to the selection process as well as the contributing authors. We would like also to express our gratitude to all members of the VSL 2014 organizing committee for their help in organizing TERMGRAPH 2014.

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(TERMGRAPH 2014 PC co-chairs)

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