



Proceedings of the  
12th International Workshop on Graph Transformation  
and Visual Modeling Techniques  
(GT-VMT 2013)

Preface

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## Preface

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This volume contains the proceedings of the International Workshop on Graph Transformations and Visual Modeling Techniques (GT-VMT 2013), held in Rome, Italy on 23rd-24th March 2013, as part of the European Joint Conferences on Theory and Practice of Software (ETAPS 2013).

GT-VMT 2013 is the twelfth workshop of a series that serves as a forum for all researchers and practitioners interested in the use of visual notations (especially graph-based), techniques and tools for the specification, modeling, validation, manipulation and verification of complex systems.

The aim of the workshop is to promote engineering approaches that provide effective sound tool support for visual modeling languages, enhancing formal reasoning at the syntactic as well as semantic level (e.g., for model specification, model analysis, model transformation, and model consistency management) in different domains, such as UML, Petri Nets, Graph Transformation or Business Process/Workflow Models. This year's workshop has a special theme of the analysis of non-functional / extra-functional / quality properties like performance, real-time, safety, reliability, energy consumption.

Contributions have been sought in relation to: visual languages definition and syntax, static and dynamic semantics of visual languages, visual/graph-based analysis in software engineering, visual/graph constraints, model transformations and their application in model-driven development, visual modeling techniques and graph transformation applied to patterns, visual modeling techniques and graph transformations for systems with quality properties, case studies and novel application areas, tool support and efficient algorithms.

We received 21 abstract submissions and 19 paper submissions. The submissions were each reviewed by at least three members of the program committee. Out of all submissions 13 papers were accepted for presentation and publishing in the workshop proceedings. The papers' topics include theoretical foundations of graph transformations, verification and validation approaches, graphical editors, requirements specification, tool support, and case studies. We are happy that Andrea Corradini, University of Pisa (Italy), and Holger Giese, University of Potsdam (Germany), complement the topics with their keynote talks. The keynote by Andrea Corradini is part of a joint session with the TERMGRAPH workshop which in addition to the keynote includes one paper from each workshop.

We wish to thank all authors for submitting papers to GT-VMT and presenting their papers at the workshop. We wish to thank the program committee members and the additional reviewers for their indepth reviews of the submitted papers. The GT-VMT workshop would not be possible without the support of the ETAPS 2013 organizers. Finally, we wish to thank Tiziana Margiara, Julia Padberg, and Gabriele Taentzer of ECEASST for providing the opportunity to publish the proceedings.

Matthias Tichy and Leila Ribeiro, March 2013

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