

# Preface

This volume contains selected papers from WADT 2002, the 16th International Workshop on Algebraic Development Techniques. Like its predecessors, WADT 2002 focussed on the algebraic approach to the specification and development of systems, an area that was born around the algebraic specification of abstract data types and encompasses today the formal design of software systems, new specification frameworks and a wide range of application areas.

WADT 2002 took place at the convent of Frauenchiemsee, Germany, on September 24–27, 2002, and was organized by Rolf Hennicker, Dirk Pattinson and Martin Wirsing. The workshop also included a special track on Formalism, Logic, Institution – Relating, Translating and Structuring (FLIRTS), and three satellite events: a meeting of the IFIP Working Group 1.3 on Foundations of System Specification, a Workshop on Global Computing organized by the AGILE project, and a Workshop on Multimedia Instruction in Safe and Secure Systems (MMISS).

The program consisted of invited talks by Egidio Astesiano (Genoa, Italy), Andrew Gordon (Cambridge, UK), and Jan Rutten (Amsterdam, The Netherlands), and 44 presentations describing ongoing research on main topics of the workshop: formal methods for system development, specification languages and methods, systems and techniques for reasoning about specifications, specification development systems, methods and techniques for concurrent, distributed and mobile systems, and algebraic and co-algebraic foundations.

The steering committee of WADT consisted of Michel Bidoit, Hans-Jörg Kreowski, Peter Mosses, Fernando Orejas, Francesco Parisi-Presicce, Donald Sannella, and Andrzej Tarlecki. With the help of Till Mossakowski for the FLIRTS track, and the local organizers, several papers were selected, and the authors were invited to submit a full paper for possible inclusion in the workshop proceedings. All submissions underwent a careful refereeing process. The selection committee then made the final decisions.

This volume contains the final versions of the 20 contributions that were accepted. It contains also two invited papers, those of Egidio Astesiano and Jan Rutten, and two invited presentations of the AGILE project on Software Architecture for Global Computing and of the MMISS project on Multimedia Instruction in Safe and Secure Systems. We are also proud to present in this volume the cantata “Zero, Connected, Empty” which was specially written for the banquet of the workshop. This cantata was composed by Ryoko Goguen with words by Joseph Goguen; an essay by these authors explains some of the thoughts behind the cantata.

We are extremely grateful to all the referees who helped the selection committee in reviewing the submissions: M. Cerioli, R. Diaconescu, J.A. Goguen, B. Hoffmann, M. Hofmann, S. Katsumata, R. Klempien-Hinrichs, B. Konikowska,

A. Kurz, D. Llywelyn, C. Lüth, F. Nickl, P. Ölveczky, C. Oriat, W. Pawlowski, G. Reggio, H. Reichel, M. Roggenbach, G. Rosu, and L. Schröder.

The workshop was jointly organized by IFIP WG 1.3 (Foundations of System Specification), GI Fachgruppe 0.1.7 (Specification and Semantics), and the Graduiertenkolleg “Logic in Computer Science” of LMU Munich and TU Munich. WADT 2002 received generous sponsorship from the following organizations:

DFG (Deutsche Forschungsgemeinschaft),  
Institut für Informatik, Ludwig-Maximilians-Universität München  
Münchner Universitätsgesellschaft

As organizers of the workshop, we would like to express our deepest thanks to Sister Scholastica of the convent of Frauenchiemsee for hosting the workshop with dedication and care, and for greatly facilitating the innumerable local organization tasks. Hubert Baumeister, Marianne Diem, Anton Fasching, Florian Hacklinger, Piotr Kosiuczenko, Philipp Meier and several other members of the department provided invaluable help throughout the preparation and organization of the workshop. We are grateful to Springer-Verlag for their helpful collaboration and quick publication.

Finally, we thank all workshop participants both for lively discussions and for creating a friendly and warm atmosphere in spite of all the rain!

July 2003

Martin Wirsing, Dirk Pattinson, Rolf Hennicker