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Recent Trends in Algebraic Development Techniques

17th International Workshop, WADT 2004
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Revised Selected Papers



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Volume Editors

José Luiz Fiadeiro

University of Leicester, Department of Computer Science

Leicester LE1 7RH, UK

E-mail: jose@fiadeiro.org

Peter D. Mosses

University of Wales Swansea, Department of Computer Science

Singleton Park, Swansea SA2 8PP, UK

E-mail: P.D.Mosses@swan.ac.uk

Fernando Orejas

Universitat Politècnica de Catalunya

Departament de Llenguatges i Sistemes Informàtics

Campus Nord C5, Jordi Girona 1-3, 08034 Barcelona, Spain

E-mail: orejas@lsi.upc.es

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Preface

This volume contains selected papers from WADT 2004, the 17th International Workshop on Algebraic Development Techniques. Like its predecessors, WADT 2004 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 2004 took place at the Technical University of Catalonia (UPC), Barcelona, Spain, on 27–29 March 2004, and was organized by Fernando Orejas and Jordi Cortadella.

The program consisted of invited talks by Luís Caires (Universidade Nova de Lisboa, Portugal) and Reiko Heckel (University of Paderborn, Germany), and 33 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, consisting of Michel Bidoit, José Fiadeiro, Hans-Jörg Kreowski, Peter Mosses, Fernando Orejas, Francesco Parisi-Presicce, and Andrzej Tarlecki, with the additional help of Christine Choppy and Till Mossakowski, selected several presentations and invited their authors to submit a full paper for possible inclusion in this volume. All submissions underwent a careful refereeing process. We are extremely grateful to all the referees who helped in reviewing the submissions: H. Baumeister, L. Caires, A. Cherchago, R. Heckel, R. Hennicker, F. Jacquemard, R. Klempien-Hinrichs, C. Lüth, S. Merz, W. Pawłowski, and L. Schröder.

This volume contains the final versions of the 14 contributions that were accepted. It contains also the invited paper of Reiko Heckel, co-authored with Sebastian Thöne.

The workshop was jointly organized with IFIP WG 1.3 (Foundations of System Specification), and received generous sponsorship from the following organizations:

- Spanish Ministry of Science and Technology (MCYT)
- Catalan Department for University, Research and Information Society (DURSI)
- Technical University of Catalonia (UPC)

David Banyeres, Robert Clariso, Kyller Costa, Nilesh Modi, Jiangtao Meng, Nikos Mylonakis, Sonia Perez, Edelmira Pasarella, and Elvira Pino provided invaluable help throughout the preparation and organization of the workshop. We are grateful to Springer for its helpful collaboration and quick publication.

Finally, we would like to announce that, starting in 2005, WADT will join forces and reputations with CMCS, the International Workshop on Coalgebraic Methods in Computer Science, to create a new high-level biennial international event: CALCO, the Conference on Algebra and Coalgebra in Computer Science.

December 2004

José Fiadeiro, Peter Mosses, Fernando Orejas

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