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Preface

This volume contains the proceedings of the 17th International Conference on Concurrency Theory (CONCUR) held in Bonn, Germany, August 27–30, 2006.

The purpose of the CONCUR conference series is to bring together researchers, developers and students in order to advance the theory of concurrency and promote its applications. Interest in this topic is continuously growing, as a consequence of the importance and ubiquity of concurrent systems and their applications and the scientific relevance of their foundations. The scope of CONCUR covers all areas of semantics, logics, and verification techniques for concurrent systems. Topics include basic models and logics of concurrent and distributed computation (such as process algebras, Petri nets, domain theoretic or game theoretic models, modal and temporal logics), specialized models or classes of systems (such as circuits, synchronous systems, real-time and hybrid systems, stochastic systems, databases, mobile and migrating systems, parametric protocols, security protocols), related verification techniques and tools (such as state-space exploration, model-checking, synthesis, abstraction, automated deduction, testing), and related programming models (such as distributed, constraint- or object-oriented, graph rewriting, as well as associated type systems, static analyses, abstract machines, and environments).

This volume starts with five invited papers covering the invited lectures and tutorials of the conference. The remaining 29 papers were selected by the Programme Committee out of 101 submissions after a very intensive reviewing and discussion phase. We would like to thank the members of the Programme Committee and the external reviewers for their excellent and hard work.

The conference programme contained three invited lectures and two invited tutorials. The invited talks were given by Edward A. Lee (University of California at Berkeley, USA), Jan Willem Klop, (Free University of Amsterdam, The Netherlands) and Orna Kupferman (Hebrew University, Israel), and the invited tutorials by Uwe Nestmann (Technical University of Berlin, Germany) and Roberto Segala (University of Verona, Italy).

Eleven workshops are affiliated to CONCUR 2006:

- Formal Methods for Industrial Critical Systems (FMICS) organized by Lubos Brim and Martin Leucker
- Verification of Infinite-State Systems (INFINITY) organized by Ahmed Bouajjani
- Expressiveness in Concurrency (EXPRESS) organized by Roberto Amadio and Iain Phillips
- Structural Operational Semantics (SOS) organized by Rob van Glabbeek and Peter D. Mosses
- Geometric and Topological Methods in Concurrency (GETCO) organized by Eric Goubault

- German Verification Day (GVD), organized by Werner Damm and Wolfgang Paul
- Foundations of Coordination Languages and Software Architectures (FOCLASA) organized by Carlos Canal and Mirko Viroli
- Parallel and Distributed Model Checking (PDMC) organized by Boudewijn Haverkort and Jaco van de Pol
- Security Issues in Coordination Models, Languages, and Systems (SecCo) organized by Dieter Gollmann and Peter Ryan
- Control and Observation of Real-Time Open Systems (CORTOS) organized by Franck Cassez
- Graph Transformation for Verification and Concurrency (GT-VC) organized by Arend Rensink

We would like to thank the CONCUR Steering Committee, the workshop organizers, the authors, and all Organizing Committee members for their contributions to the success of the conference. Finally, we gratefully acknowledge the generous support received from the Deutsche Forschungsgemeinschaft (DFG) and from the European Research Consortium for Informatics and Mathematics (ERCIM).

June 2006 Christel Baier and Holger Hermanns

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