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# CONCUR 2002 – Concurrency Theory

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## Preface

This volume contains the proceedings of the 13th International Conference on Concurrency Theory (CONCUR 2002) held in Brno, Czech Republic, August 20–23, 2002.

The purpose of the CONCUR conferences 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 of the scientific relevance of their foundations. The scope covers all areas of semantics, logics and verification techniques for concurrent systems. Topics include concurrency-related aspects of models of computation and semantic domains, process algebras, Petri nets, event structures, real-time systems, hybrid systems, probabilistic systems, model-checking, verification techniques, refinement techniques, term and graph rewriting, distributed programming, logic constraint programming, object-oriented programming, typing systems and algorithms, security, case studies, tools and environments for programming and verification.

The first two CONCUR conferences were held in Amsterdam (The Netherlands) in 1990 and 1991, the following ones in Stony Brook (USA), Hildesheim (Germany), Uppsala (Sweden), Philadelphia (USA), Pisa (Italy), Warsaw (Poland), Nice (France), Eindhoven (The Netherlands), University Park (Pennsylvania, USA), and Aalborg (Denmark). The proceedings have appeared in Springer LNCS, as Vols. 458, 527, 630, 715, 836, 962, 1119, 1243, 1466, 1664, 1877, and 2154.

Out of 101 regular papers submitted this year, 32 were accepted for presentation at the conference and are included in this volume. The conference also included five talks by invited speakers: Amir Pnueli (Weizmann Institute of Science, Rehovot, Israel) and Vaughan Pratt (Stanford University, USA) reappeared as CONCUR invited speakers after 10 years, and further invited talks were given by Wan Fokkink (CWI Amsterdam, The Netherlands), Alexander Rabinovich (Tel Aviv University, Israel) and Davide Sangiorgi (INRIA Sophia Antipolis, France). Additionally, there were two invited tutorials, given by Julian Bradfield (University of Edinburgh, UK) and Andrew D. Gordon (Microsoft Research, Cambridge, UK).

CONCUR 2002 was accompanied by a special event called Tools Day, organized by Ivana Černá, and by the following satellite workshops:

- CMCIM'02 (Categorical Methods for Concurrency, Interaction, and Mobility), organized by Alexander Kurz, held on 24 August 2002.
- EXPRESS'02 (9th International Workshop on Expressiveness in Concurrency), organized by Uwe Nestmann and Prakash Panangaden, held on 19 August 2002.

- FATES'02 (Formal Approaches to Testing of Software), organized by Robert M. Hierons and Thierry Jéron, held on 24 August 2002.
- FOCLASA'02 (1st International Workshop on Foundations of Coordination), organized by Antonio Brogi and Jean-Marie Jacquet, held on 24 August 2002.
- INFINITY'02 (4th International Workshop on Verification of Infinite State Systems), organized by Antonín Kučera and Richard Mayr, held on 24 August 2002.
- MTCS'02 (3rd International Workshop on Models for Time-Critical Systems), organized by Kim Larsen and Walter Vogler, held on 24 August 2002.
- PDMC'02 (1st International Workshop on Parallel and Distributed Model Checking), organized by Luboš Brim and Orna Grumberg, held on 19 August 2002.

We would like to thank all the Program Committee members, and their sub-referees, for their meritorious work and for establishing the selective program of the conference. We also thank the invited speakers for their talks, and tutorials, all the authors of submitted papers, and all the participants of the conference. Our thanks also go to the organizers of the affiliated events whose efforts contributed to the attractiveness of CONCUR 2002.

Special thanks are due to the organizing committee chaired by Jan Staudek. Jiří Barnat, Jan Strejček and David Šafránek took care of the CONCUR 2002 web pages, including the submission server and the software systems for electronic PC and OC management. They effectively managed many other aspects of the organization; their assistance has been indispensable. Tomáš Staudek designed the logo and the poster of the conference.

The conference was run under the auspices of Jiří Zlatuška, the Rector of Masaryk University. A lot of advice on how to prepare the conference was kindly provided by Jozef Gruska. We also gratefully acknowledge financial support from the European Research Consortium in Informatics and Mathematics (ERCIM), as well as support from the Faculty of Informatics, Masaryk University in Brno.

June 2002

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