

# Preface

This volume contains the proceedings of the 10th International Conference on Concurrency Theory (CONCUR'99) held in Eindhoven, The Netherlands, 24-27 August 1999.

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 of CONCUR'99 covers all areas of semantics, logics and verification techniques for concurrent systems. A list of specific topics includes (but is not limited to) concurrency-related aspects of: models of computation and semantic domains, process algebras, Petri nets, event structures, real-time systems, hybrid systems, stochastic systems, decidability, model-checking, verification techniques, refinement techniques, term and graph rewriting, distributed programming, logic constraint programming, object-oriented programming, typing systems and algorithms, case studies, and tools and environments for programming and verification.

The first two CONCUR conferences were held in Amsterdam (NL) in 1990 and 1991, the following ones in Stony Brook (USA), Hildesheim (D), Uppsala (S), Philadelphia (USA), Pisa (I), Warsaw (PL) and Nice (F). The proceedings have appeared in Springer LNCS, as Volumes 458, 527, 630, 715, 836, 962, 1119, 1243, and 1466.

Of the 91 regular papers submitted this year, 32 were accepted for presentation at the conference and are included in the present volume. Apart from these, the conference included four invited presentations, by Rance Cleaveland (State University of New York at Stony Brook, USA), Javier Esparza (Technische Universität München, D), Rob van Glabbeek (Stanford University, USA) and Catuscia Palamidessi (Pennsylvania State University, USA), and three invited tutorials, by Petr Jančar (Technical University of Ostrava, CZ), Nils Klarlund (AT&T Labs Research, USA) and Jan Tretmans (Universiteit Twente, NL).

We want to thank all members of the program committee, and their subreferees, for selecting the papers to be presented.

Special thanks are due to the local organization committee, chaired by Jan Friso Groote. Dragan Bošnački arranged the tool demonstrations, André Engels was webmaster, Kees Middelburg was in charge of the tutorials, and Martijn Oostdijk took care of the submission software (written by Vladimiro Sassone). Local arrangements, and help with registration, were provided by Marcella de Rooij, Desiree Meijers, and Anne-Meta Oversteegen.

The conference had three satellite events, all held on 23 August 1999. These were PROBMIV'99 (Workshop on Probabilistic Methods in Verification), EXPRESS'99 (6th International Workshop on Expressiveness in Concurrency), and VFM (Symposium on Visual Formal Methods). We thank Eindhoven University

of Technology for hosting the event and providing many facilities. We thank our sponsors IPA (Institute of Programming Research and Algorithmics, NL), Philips Research Eindhoven, and EESI (Eindhoven Embedded Systems Institute).

Eindhoven  
June 1999

Jos Baeten and Sjouke Mauw  
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