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Preface

The 30th International Colloquium on Automata, Languages and Programming (ICALP 2003) was held from June 30 to July 4 on the campus of the Technische Universiteit Eindhoven (TU/e) in Eindhoven, The Netherlands. This volume contains all contributed papers presented at ICALP 2003, together with the invited lectures by Jan Bergstra (Amsterdam), Anne Condon (Vancouver), Amos Fiat (Tel Aviv), Petra Mutzel (Vienna), Doron Peled (Coventry) and Moshe Vardi (Houston).

Since 1972, ICALP has been the main annual event of the European Association for Theoretical Computer Science (EATCS). The ICALP program can be divided into two tracks, viz. track A (algorithms, automata, complexity, and games) and track B (logics, semantics, and theory of programming).

In response to the Call for Papers, the program committee received 212 submissions: 131 for track A and 81 for track B. The committee met on March 14 and 15 in Haarlem, The Netherlands and selected 84 papers for inclusion in the scientific program. The selection was based on originality, quality and relevance to theoretical computer science. We wish to thank all authors who submitted extended abstracts for consideration, and all referees and subreferees who helped in the extensive evaluation process.

The EATCS Best Paper Award for Track A was given to the paper “The Cell Probe Complexity of Succinct Data Structures” by Anna Gál and Peter Bro Miltersen and the award for Track B was given to the paper “A Testing Scenario for Probabilistic Automata” by Mariëlle Stoelinga and Frits Vaandrager.

ICALP 2003 was a special ICALP. Two other computer science conferences co-located with ICALP this time: the 24th International Conference on Application and Theory of Petri Nets (ATPN 2003) and the Conference on Business Process Management (BPM 2003). During ICALP 2003 the following special events took place: the EATCS Distinguished Service Award was given to Grzegorz Rozenberg (Leiden), and the Lifetime Achievement Award of the NVTI (Dutch Association for Theoretical Computer Science) was given to N.G. de Bruijn (Eindhoven). Several high-level workshops were held as satellite events of ICALP 2003, coordinated by Erik de Vink. These included the following workshops: Algorithms for Massive Data Sets, Foundations of Global Computing (FGC), Logic and Communication in Multi-Agent Systems (LCMAS), Quantum Computing, Security Issues in Coordination Models, Languages and Systems (SecCo), Stochastic Petri Nets, Evolutionary Algorithms, the 1st International Workshop on the Future of Neural Networks (FUNN), and Mathematics, Logic and Computation (workshop in honor of N.G. de Bruijn’s 85th birthday). In addition, there was a discussion forum on Education Matters — the Challenge of Teaching Theoretical Computer Science organized by Hans-Joerg Kreowski.

The scientific program of ICALP 2003 and satellite workshops showed that theoretical computer science is a vibrant field, deepening our insights into the foundations and future of computing and system design in many application areas.

The sponsors of ICALP 2003 included the municipality of Eindhoven, Sordexho, Océ, the research school IPA, the European Educational Forum, Springer-Verlag, Elsevier, Philips Research, Atos Origin, Pallas Athena, Pearson Education Benelux, and ABE Foundation. We are very grateful to the Technische Universiteit Eindhoven for supporting and hosting ICALP 2003. The organizing committee consisted of Jos Baeten, Tijn Borghuis, Erik Luit, Emmy van Otterdijk, Anne-Meta Oversteegen, Thieu Rietjens, Karin Touw and Erik de Vink, all of the TU/e. Thanks is owed to them, and to everybody else who helped, for their outstanding effort in making ICALP 2003 a success.

June 2003

Jos Baeten
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