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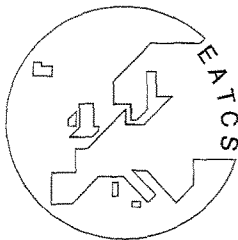
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PREFACE

ICALP 92 is the 19th International Colloquium on Automata, Languages, and Programming in a series of meetings sponsored by the European Association for Theoretical Computer Science (EATCS). It is a broadly based conference covering all aspects of Theoretical Computer Science including topics like: computability, automata, formal languages, term rewriting, analysis of algorithms, computational geometry, computational complexity, symbolic and algebraic computation, cryptography, data types and data structures, theory of data bases and knowledge bases, semantics of programming languages, program specification, transformation and verification, foundations of logic programming, theory of logical design and layout, parallel and distributed computation, theory of concurrency, theory of robotics.

ICALP 92 was held at Technische Universität Wien from July 13 to July 17, 1992. The Organizing Committee consisted of G. Baron, P. Kirschenhofer, W. Kuich (Chairman), H. Maurer, H. Prodinger, F. Urbanek.

Previous ICALPs were held in Madrid (1991), Warwick (1990), Stresa (1989), Tampere (1988), Karlsruhe (1987), Rennes (1986), Nafplion (1985), Antwerp (1984), Barcelona (1983), Aarhus (1982), Haifa (1981), Amsterdam (1980), Graz (1979), Udine (1978), Turku (1977), Edinburgh (1976), Saarbrücken (1974), Paris (1972). ICALP 93 will be held in Lund, Sweden, from July 5 to July 9, 1993.

The Programme Committee of ICALP 92 consisted of G. Ausiello, J. Berstel, R. V. Book, B. Buchberger, R. Cori, R. De Nicola, H. Edelsbrunner, S. Even, Ph. Flajolet, D. Harel, M. C. B. Hennessy, N. D. Jones, J. W. Klop, D. C. Kozen, W. Kuich (Chairman), B. Monien, E.-R. Olderog, B. Rován, A. Salomaa, S. Skyum, A. Tarlecki. It has selected 52 papers from 190 papers submitted in response to the call for papers. These papers came from the following countries: Australia, Austria, Belgium, Canada, China, CSFR, Denmark, Finland, France, FRG, Greece, Hungary, India, Israel, Italy, Japan, Latvia, Lithuania, Netherlands, Poland, Russia, Singapore, Spain, Sweden, Switzerland, Taiwan, UK, Ukraine, USA. Each submitted paper has been evaluated by at least four members of the Programme Committee. The final selection was made during the selection meeting on February 1–2, 1992 in Wien, in which all Programme Committee members except S. Even and D. Harel could participate. Together with six invited presentations all 52 selected papers are contained in this volume. It is a pleasure for the conference chairman to thank the members of the Programme Committee for their evaluation of the papers, and the many referees who assisted in this process. The list of referees given in this volume is as complete as we could achieve, and we apologize for any possible omissions or errors.

The papers in this volume are printed in the order of presentation at ICALP 92 and thus grouped into sessions, most of which are thematic.

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