

# Preface

The 7th Annual European Symposium on Algorithms (ESA '99) is held in Prague, Czech Republic, July 16-18, 1999. This continued the tradition of the meetings which were held in

- 1993 Bad Honnef (Germany)
- 1994 Utrecht (Netherlands)
- 1995 Corfu (Greece)
- 1996 Barcelona (Spain)
- 1997 Graz (Austria)
- 1998 Venice (Italy)

(The proceedings of previous ESA meetings were published as Springer LNCS volumes 726, 855, 979, 1136, 1284, 1461.)

In the short time of its history ESA (like its sister meeting SODA) has become a popular and respected meeting.

The call for papers stated that the “Symposium covers research in the *use, design, and analysis of efficient algorithms and data structures* as it is carried out in computer science, discrete applied mathematics and mathematical programming. Papers are solicited describing original results in *all areas of algorithmic research*, including but not limited to: Approximation Algorithms; Combinatorial Optimization; Computational Biology; Computational Geometry; Databases and Information Retrieval; Graph and Network Algorithms; Machine Learning; Number Theory and Computer Algebra; On-line Algorithms; Pattern Matching and Data Compression; Symbolic Computation. The algorithms may be sequential, distributed or parallel, and they should be analyzed either mathematically or by rigorous computational experiments. Submissions that report on experimental and applied research are especially encouraged.”

The total of 122 papers were received. The program committee thoroughly reviewed the papers (each paper was sent to at least 3 members of the PC) and after an electronic discussion the agreement was reached during the PC meeting in Prague, March 26-28, 1999. (At this meeting the following members of PC were physically present: G. Billardi, H. Bodlaender, J. Diaz, A. Goldberg, M. Goemans, M. Kaufmann, B. Monien, J. Matoušek, E. Mayr, J. Nešetřil, P. Widmayer, G. Woeginger, while most of the other PC members cooperated electronically.)

The program committee selected 44 papers, which are presented in this volume.

The program of ESA' 99 includes two invited talks by Bernhard Korte (University of Bonn) and Moti Yung (Columbia, New York).

As an experiment, ESA'99 was held at the same time as ICALP'99. Only history will show whether this scheme is suitable to the European context.

The ESA'99 was organized by the Centre of Discrete Mathematics, Theoretical Computer Science and Applications (shortly DIMATIA) which is a joint venture of Charles University, the Czech Academy of Science and the Institute for Chemical Technology (all based in Prague) together with its associates (presently in Barcelona, Biele-

feld, Bonn, Bordeaux, Budapest, Novosibirsk, Pilsen, and Pisa). Also two similar centers DIMACS (Rutgers University, New Jersey) and PIMS (Vancouver, Canada) are associated members of DIMATIA. We thank all our partners for the support and all the work. We would like to thank all the members of the organizing committee, and particularly Mrs. Hana Čásenská (DIMATIA) and Mrs. Anna Kotěšovcová (CONFORG). The electronic efficiency was made possible by Jiří Fiala, Jiří Sgall, Vít Novák, and Pavel Valtr.

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We hope that the present volume reflects the manifold spectrum of contemporary algorithmic research and that it convincingly demonstrates that this area is alive and well. We wish the next ESA (to be held in Saarbruecken) success and many excellent contributions.

July 1999

Jaroslav Nešetřil

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ESA'99 is organized by the

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