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Jiří Wiedermann Peter van Emde Boas
Mogens Nielsen (Eds.)

Automata, Languages and Programming

26th International Colloquium, ICALP'99
Prague, Czech Republic, July 11-15, 1999
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Foreword

ICALP – the International Colloquium on Automata, Languages, and Programming – is a series of annual conferences of the European Association for Theoretical Computer Science (EATCS). ICALP’99 was organized by the Institute of Computer Science of the Academy of Sciences of the Czech Republic in co-operation with the Action M Agency. Stimulated by the positive experience from previous meetings, the guiding idea of the ICALP’99 organization was to keep and to enhance the idea of a parallel two-track conference with invited plenary talks.

Similarly to the two parts of the journal Theoretical Computer Science, Track A of the meeting is devoted to *Algorithms, Automata, Complexity, and Games*, and Track B to *Logic, Semantics, and Theory of Programming*. The Program Committee was structured along these same lines. As a further innovation, ICALP’99 was coordinated with the European Symposium on Algorithms (ESA’99) in such a way that both conferences took place in the same location with the former immediately followed by the latter.

ICALP’99 was the 26th in the series of ICALP colloquia. Previous colloquia were held in Paris (1972), Saarbrücken (1974), Edinburgh (1976), Turku (1977), Udine (1978), Graz (1979), Amsterdam (1980), Haifa (1981), Aarhus (1982), Barcelona (1983), Antwerp (1984), Nafplion (1985), Rennes (1986), Karlsruhe (1987), Tampere (1988), Stresa (1989), Warwick (1990), Madrid (1991), Vienna (1992), Lund (1993), Jerusalem (1994), Szeged (1995), Paderborn (1996), Bologna (1997), and Aalborg (1998). In the year 2000 ICALP will be held in Geneva.

The Program Committee selected 56 papers from a total of 126 submissions. Authors of submitted papers came from 20 countries. Each paper was reviewed by at least four Program Committee members who were often assisted by subreferees. The Program Committee meeting took place in Prague, on March 13–14, 1999. This volume contains all accepted papers and ten invited papers plus the abstract of the keynote address by Juris Hartmanis.

It is our pleasure to announce that at the opening of the conference, Jan van Leeuwen from Utrecht University, the Netherlands, received the Bolzano Honorary Medal of the Academy of Sciences of the Czech Republic for his contribution to the development of computer science in general and his long-term, fruitful co-operation with Czech computer scientists in particular. At this occasion he gave an acceptance speech entitled “Embedded Computations”.

We thank all Program Committee members and the subreferees who assisted them in their work. A special thanks goes to Vladimiro Sassone who created the WWW software used for electronic submission and reviewing. The secretary of the Program Committee, Martin Beran, deserves our special gratitude for running and extending the above mentioned software, for realizing and maintaining the conference web page, and, last but not least, for his preparing the electronic version of the proceedings for Springer-Verlag.

We gratefully acknowledge the support from the European Research Consortium in Informatics and Mathematics (ERCIM), the Grant Agency of the Czech Republic (GAČR), Deloitte&Touche and the Institute of Computer Science of the ASČR.

The cooperation with Springer-Verlag and the local arrangement by Action M was, as usual, excellent.

May 1999

Jiří Wiedermann, Peter van Emde Boas, Mogens Nielsen

Invited Speakers

Miklos Ajtai	<i>IBM Research, Almaden, USA</i>
N.G. de Bruijn	<i>Eindhoven University of Technology, NL</i>
Luca Cardelli	<i>Microsoft Research, Cambridge, UK</i>
Kevin Compton; Scott Dexter	<i>BRICS, DK; City University of New York, USA</i>
Karl Crary; Greg Morrisett	<i>Carnegie Mellon University; Cornell University, USA</i>
Felipe Cucker	<i>City University of Hong Kong, CHI</i>
Abbas Edalat; Marko Krznaryč	<i>Imperial College, London, UK</i>
Juris Hartmanis (keynote address)	<i>Cornell University, Ithaca, NY, USA</i>
Grzegorz Rozenberg; Arto Salomaa	<i>Leiden University, NL; Turku University, FI</i>
Jeff Vitter	<i>Duke University, USA; INRIA Sophia Antipolis, FR</i>
Osamu Watanabe	<i>Tokyo Institute of Technology, JP</i>

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Michael Sipser	<i>MIT, Cambridge, US</i>
Paul Spirakis •	<i>CTI, Patras, GR</i>
Michiel Smid •	<i>University of Magdeburg, DE</i>

¹ Members marked with • participated in the PC meeting.

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