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34th International Colloquium, ICALP 2007
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Proceedings

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Preface

The 34th International Colloquium on Automata, Languages and Programming (ICALP 2007) was held in Wrocław, Poland, on July 9–13, 2007. This volume contains all papers selected for presentation at ICALP 2007. The conference program also included excellent invited lectures by Bernard Chazelle (Princeton), Ivan Damgård (Aarhus), Fedor Fomin (Bergen), Gordon Plotkin (Edinburgh), Michael O. Rabin (Harvard), and Fred Schneider (Cornell); some of these were accompanied by papers that are included in this volume as well. In addition, a paper by Michael O. Rabin, who gave a joint LICS/ICALP invited lecture, is included in the proceedings of LICS 2007.

ICALP constitutes a series of annual conferences of the European Association for Theoretical Computer Science (EATCS), the first one of which took place in 1972. This year, the ICALP program consisted of three tracks, following the model established with ICALP 2005: Track A focusing on algorithms, automata, complexity and games; Track B focusing on logic, semantics and theory of programming; and Track C focusing on security and cryptography foundations.

In response to the call for papers, the Program Committee received 242 submissions, of which 149 for Track A, 59 for Track B and 34 for Track C. The Program Committee selected 76 papers for inclusion in the scientific program, in particular, 41 papers for Track A, 24 papers for Track B, and 11 papers for Track C. The selection was made by the Program Committee based on originality, quality, and relevance to theoretical computer science.

Even though the total number of submissions was somewhat lower than in the previous years, the overall quality of the submissions was very good indeed. During the highly competitive selection process — as tough as it is expected to be at ICALP — many good submissions had to be rejected and the outcome resulted in a very interesting overall program.

ICALP 2007 was held in conjunction with the 22nd Annual IEEE Symposium on Logic in Computer Science (LICS 2007), the 9th ACM-SIGPLAN International Symposium on Principles and Practice of Declarative Programming (PPDP 2007), and Logic Colloquium 2007. The following workshops were held as satellite events of ICALP 2007 and LICS 2007:

- DCM 2007: 3rd International Workshop on Development of Computational Models;
- FCS-ARSPA 2007: Joint Workshop on Foundations of Computer Security and Automated Reasoning for Security Protocol Analysis;
- GOCP 2007: International Workshop on Group-Oriented Cryptographic Protocols;
- LCC 2007: 9th International Workshop on Logic and Computational Complexity;
- PAuL 2007: International Workshop on Probabilistic Automata and Logics;

- Reasoning about and with Games 2007;
- SOS 2007: 4th Workshop on Structural Operational Semantics;
- TRSH 2007: Theory of Randomized Search Heuristic;
- TMCNAA 2007: Workshop on Traced Monoidal Categories, Network Algebras, and Applications; and
- WCAN 2007: 3rd Workshop on Cryptography for Ad-hoc Networks.

Moreover, the 3rd International Workshop on Algorithmic Aspects of Wireless Sensor Networks (ALGOSENSORS 2007) was held in Wrocław at the same time.

We wish to thank all authors who submitted extended abstracts for consideration, the Program Committee for their hard work, and the referees who assisted the Program Committee in the evaluation process.

We are grateful to the University of Wrocław for hosting ICALP 2007 and to the Organizing Committee at the Institute of Computer Science, chaired by Jerzy Marcinkowski, for mastering the logistics of ICALP 2007 and the concurrent events. We also thank the University of Wrocław and the City of Wrocław for their financial support.

We gratefully acknowledge the use of the following two conference management systems: EasyChair (Tracks A and B) by Andrei Voronkov and the Web Submission and Review Software by Shai Halevi (Track C).

April 2007

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