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# Approximation and Online Algorithms

First International Workshop, WAOA 2003 Budapest, Hungary, September 16-18, 2003 Revised Papers



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## **Preface**

The Workshop on Approximation and Online Algorithms (WAOA 2003) focused on the design and analysis of algorithms for online and computationally hard problems. Both kinds of problems have a large number of applications arising from a variety of fields. The workshop also covered experimental research on approximation and online algorithms. WAOA 2003 took place in Budapest, Hungary, from September 16 to September 18. The workshop was part of the ALGO 2003 event, which also hosted ESA 2003, WABI 2003, and ATMOS 2003.

Topics of interest for WAOA 2003 were: competitive analysis, inapproximability results, randomization techniques, approximation classes, scheduling, coloring and partitioning, cuts and connectivity, packing and covering, geometric problems, network design, and applications to game theory and financial problems. In response to our call for papers we received 41 submissions. Each submission was reviewed by at least 3 referees, who judged the papers on originality, quality, and consistency with the topics of the conference. Based on these reviews the program committee selected 19 papers for presentation at the workshop and for publication in this proceedings. This volume contains the 19 selected papers and 5 invited abstracts from an ARACNE minisymposium which took place as part of WAOA.

We would like to thank all the authors who responded to the call for papers and the invited speakers who gave talks at the ARACNE minisymposium. We specially thank the local organizer Janos Csirik, the members of the program committee

- Susanne Albers (University of Freiburg)
- Evripidis Bampis (University of Evry)
- Danny Chen (University of Notre Dame)
- Amos Fiat (Tel Aviv University)
- Rudolf Fleischer (Honk Kong University of Science and Technology)
- Pino Persiano (University of Salerno)
- Jose Rolim (University of Geneva)
- Martin Skutella (Max-Planck-Institut für Informatik)

#### and the subreferees

- Aleksei Fishkin
- Dimitris Fotakis
- Hal Kierstead
- Arie Koster
- Michael Langberg
- Christian Liebchen
- Ulrich Meyer
- Guido Schaefer
- Guochuan Zhang
- Uri Zwick

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July 2003

Klaus Jansen and Roberto Solis-Oba Program Chairs

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