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# Approximation and Online Algorithms

9th International Workshop, WAOA 2011 Saarbrücken, Germany, September 8-9, 2011 Revised Selected Papers



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### **Preface**

The 9th Workshop on Approximation and Online Algorithms (WAOA 2011) took place in Saarbrücken, Germany, September 8–9, 2011. The workshop was part of the ALGO 2011 event that also hosted ESA 2011, WABI 2011, IPEC 2011, ALGOSENSORS 2011, and ATMOS 2011. The previous WAOA workshops were held in Budapest (2003), Rome (2004), Palma de Mallorca (2005), Zurich (2006), Eilat (2007), Karlsruhe (2008), Copenhagen (2009), and Liverpool (2010). The proceedings of these previous WAOA workshops have appeared as LNCS volumes 2909, 3351, 3879, 4368, 4927, 5426, 5893, and 6534, respectively.

The Workshop on Approximation and Online Algorithms focuses on the design and analysis of algorithms for online and computationally hard problems. Both kinds of problems have a large number of applications in a wide variety of fields. Topics of interest for WAOA 2011 were: algorithmic game theory, approximation classes, coloring and partitioning, competitive analysis, computational finance, cuts and connectivity, geometric problems, inapproximability results, mechanism design, network design, packing and covering, paradigms for design and analysis of approximation and online algorithms, parameterized complexity, randomization techniques and scheduling problems.

In response to the call for papers, we received 48 submissions. Each submission was reviewed by at least three referees. The submissions were mainly judged on originality, technical quality, and relevance to the topics of the conference. Based on the reviews, the Program Committee selected 21 papers. In addition to the presentations of the 21 accepted papers, Klaus Jansen from the University of Kiel gave an invited talk on "Approximation Algorithms for Scheduling and Packing Problems."

We are grateful to Andrei Voronkov for providing the EasyChair conference system, which was used to manage the electronic submissions and the review process. It made our task much easier. We would also like to thank all the authors who submitted papers to WAOA 2011 as well as the local organizers of ALGO 2011.

November 2011

Roberto Solis-Oba Giuseppe Persiano

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