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Roberto Solis-Oba · Rudolf Fleischer (Eds.)

# Approximation and Online Algorithms

15th International Workshop, WAOA 2017  
Vienna, Austria, September 7–8, 2017  
Revised Selected Papers

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# Preface

The 15th Workshop on Approximation and Online Algorithms (WAOA 2017) took place in Vienna, Austria, September 7–8, 2017. The workshop was part of the ALGO 2017 event that also hosted ESA, IPEC, ALGOSENSORS, ATMOS, and ALGO CLOUD. The previous WAOA workshops were held in Budapest (2003), Rome (2004), Palma de Mallorca (2005), Zurich (2006), Eilat (2007), Karlsruhe (2008), Copenhagen (2009), Liverpool (2010), Saarbrücken (2011), Ljubljana (2012), Sophia Antipolis (2013), Wraclas (2014), Patras (2015), and Aarhus (2016). The proceedings of previous WAOA workshops have appeared in the *Lecture Notes in Computer Science* series.

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 2017 were: graph algorithms, inapproximability results, network design, packing and covering, paradigms for the design and analysis of approximation and online algorithms, parameterized complexity, scheduling problems, algorithmic game theory, coloring and partitioning, competitive analysis, computational advertising, computational finance, cuts and connectivity, geometric problems, mechanism design, resource augmentation, and real-world applications.

In response to the call for papers, we received 50 submissions. Each submission was reviewed by at least three referees. The submissions were judged on originality, technical quality, and relevance to the topics of the conference. Based on the reviews, the Program Committee selected 23 papers for presentation at the workshop. In addition to the presentations of the 23 accepted papers, Prof. Kirk Pruhs from the University of Pittsburgh gave an invited talk on “The Itinerant List Update Problem.” We are grateful to Prof. Pruhs for accepting our invitation and delivering an outstanding lecture.

The EasyChair conference system was used to manage the electronic submissions and the review process. It made our task much easier. We would like to thank all the authors who submitted papers to WAOA 2017, the members of the Program Committee, the external reviewers, and the local Organizing Committee of ALGO 2017.

October 2017

Rudolf Fleischer  
Roberto Solis-Oba

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