

# 24th Annual European Symposium on Algorithms

ESA 2016, August 22–24, 2016, Aarhus, Denmark

Edited by

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To all algorithmicists



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## ■ Preface

This volume contains the extended abstracts selected for presentation at ESA 2016, the 24th European Symposium on Algorithms, held in Aarhus, Denmark, on 22–24 August 2016, as part of ALGO 2016. The ESA symposia are devoted to fostering and disseminating the results of high-quality research on algorithms and data structures. ESA seeks original algorithmic contributions for problems with relevant theoretical and/or practical applications and aims at bringing together researchers in the computer science and operations research communities. Ever since 2002, it has had two tracks, the Design and Analysis Track (Track A), intended for papers on the design and mathematical analysis of algorithms, and the Engineering and Applications Track (Track B), for submissions dealing with real-world applications, engineering, and experimental analysis of algorithms. Information on past symposia, including locations and proceedings, is maintained at <http://esa-symposium.org>.

In response to the call for papers, ESA 2016 attracted a rather high number of 282 submissions, 230 for Track A and 52 for Track B. Paper selection was based on originality, technical quality, and relevance. Considerable effort was devoted to the evaluation of the submissions, with at least three reviews per paper. With the help of more than 1040 expert reviews and more than 470 external reviewers, the two committees selected 76 papers for inclusion in the scientific program of ESA 2016, 63 in Track A and 13 in Track B, yielding an acceptance rate of about 27%. In addition to the accepted contributions, the symposium featured two invited lectures by Giuseppe Italiano (University of Roma “Tor Vergata”, Italy) and Ola Svensson (EPFL, Switzerland). Contributions of the invited lectures are also included in this volume.

The European Association for Theoretical Computer Science (EATCS) sponsored a best paper award and a best student paper award. A submission was eligible for the best student paper award if all authors were doctoral, master, or bachelor students at the time of submission.

The best student paper award was shared by two papers: one by Michele Borassi and Emanuele Natale for their contribution “KADABRA is an ADaptive Algorithm for Betweenness via Random Approximation”, and the other by Adam Kunysz “The Strongly Stable Roommates Problem”.

The best paper award went to two papers: one by Stefan Kratsch for his contribution “A randomized polynomial kernelization for Vertex Cover with a smaller parameter” and the other one by Thomas Bläsius, Tobias Friedrich, Anton Krohmer and Sören Laue for their contribution “Efficient Embedding of Scale-Free Graphs in the Hyperbolic Plane”. Our warmest congratulations to all of them for these achievements!

We wish to thank all the authors who submitted papers for consideration, the invited speakers, the members of the Program Committees for their hard work, and all the external reviewers who assisted the Program Committees in the evaluation process. Special thanks go to the Local Organizing Committee, who helped us with the organization of the conference.

June 2016

Piotr Sankowski  
Christos Zaroliagis





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