

32nd Annual European Symposium on Algorithms

**ESA 2024, September 2–4, 2024,
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Edited by

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Preface

This volume contains the extended abstracts selected for presentation at ESA 2024, the 32nd European Symposium on Algorithms. The event was organized by Royal Holloway, University of London in Egham, United Kingdom, as a part of ALGO 2024, on September 2–4, 2024.

The scope of ESA includes original, high-quality, theoretical and applied research on algorithms and data structures. Since 2002, it has had two tracks: the Design and Analysis Track (Track A), for papers with a strong emphasis on the theoretical analysis of algorithms, and the Engineering and Applications Track (Track B), for papers reporting on the results of extensive experimental evaluations and/or providing original contributions to the engineering of algorithms for practical applications. In 2022, a Simplicity Track (Track S) was added, inviting submissions that prove or explain results, possibly already known, in a particularly clear, simple or elegant way.

In response to the call for papers for ESA 2024, 333 papers were submitted, 247 for Track A, 49 for Track B, and 37 for Track S (these numbers exclude 3 submissions that were later withdrawn). Paper selection was based on originality, technical quality, exposition quality, and relevance. Each paper received at least three reviews. The program committees selected 103 papers for inclusion in the program: 78 from Track A, 14 from Track B, and 11 from Track S, yielding an overall acceptance rate of about 31%. The presentations of the accepted papers, together with two invited talks by Vincent Cohen-Addad (Google Research, France) and Eva Rotenberg (Technical University of Denmark) promise to make up an exciting program.

The European Association for Theoretical Computer Science (EATCS) sponsored best paper and best student paper awards. A submission was eligible for the best student paper award if all authors were doctoral, master, or bachelor students at the time of submission. For Track A, the best paper award was given to Karl Bringmann, Anita Dürr, and Adam Polak for the paper “Even Faster Knapsack via Rectangular Monotone Min-Plus Convolution and Balancing”. For Track B, the best paper award was given to Hideo Bannai, Mitsuru Funakoshi, Diptarama Hendrian, Myuji Matsuda, and Simon Puglisi for the paper “Height-bounded Lempel-Ziv encodings”. For Track S, the best paper award was given to Zhiyi Huang, Zahra Parsaeian, and Zixuan Zhu for the paper “Laminar Matroid Secretary: Greedy Strikes Back”. The best student paper award was given to Daniel Hathcock and Michael Zlatin for the paper “Approximation Algorithms for Steiner Connectivity Augmentation”.

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 the over 500 external reviewers who assisted the program committees in the evaluation process. Special thanks go to the organizing committee, who helped us with the organization of the conference.

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