31st International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms

AofA 2020, June 15–19, 2020, Klagenfurt, Austria
(Virtual Conference)

Edited by

Michael Drmota
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Preface

The 31st International Conference on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2020) was planned to be held in Klagenfurt, Austria, June 15–19, 2020. Due to the Coronavirus outbreak the conference had to be shifted to an online conference.

Analysis of algorithms is a scientific basis for computation, providing a link between abstract algorithms and the performance characteristics of their implementations in the real world. The general effort to predict precisely the performance of algorithms has come to involve research in analytic combinatorics, the analysis of random discrete structures, asymptotic analysis, exact and limiting distributions, and other fields of inquiry in computer science, probability theory, and enumerative combinatorics. See `http://aofa.cs.purdue.edu/`.

The Call for Papers invited papers in

- analytic algorithmics and combinatorics,
- probabilistic analysis of algorithms, and
- randomized algorithms.

We also welcomed papers addressing problems such as: combinatorial algorithms, string searching and pattern matching, sublinear algorithms on massive data sets, network algorithms, graph algorithms, caching and memory hierarchies, indexing, data mining, data compression, coding and information theory, and computational finance. Papers were also welcomed that address bridges to research in related fields such as statistical physics, computational biology, computational geometry, and simulation.

The present issue collects 25 contributions to the AofA 2020 conference that have been refereed and selected by the Program Committee.

The planned invited speakers were

- Wojciech Szpankowski (Flajolet Lecturer), Purdue University, USA,
- Mireille Bousquet-Mélou, Université de Bordeaux, France,
- James A. Fill, The Johns Hopkins University, Baltimore, USA,
- Malwina Luczak, University of Melbourne, Australia,
- Andrew Rechnitzer, University of British Columbia, Canada.

We acknowledge the financial support by the University of Klagenfurt.

Michael Drmota and Clemens Heuberger,
on behalf of the Program Committee

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