RANDOM 2023 The 27th International Conference on Randomization and Computation

and

APPROX 2023 The 26th International Conference on Approximation Algorithms for Combinatorial Optimization Problems

http://randomconference.com/
http://approxconference.wordpress.com

September 11-13, 2023

Georgia Institute of Technology, Atlanta, GA, USA

CFP - Call for papers

SCOPE

The 27th International Workshop on Randomization and Computation (RANDOM 2023) and the 26th International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX 2023) will be held in Atlanta, USA from September 11-13, 2023.

RANDOM 2023 focuses on applications of randomness to computational and combinatorial problems while APPROX 2023 focuses on algorithmic and complexity theoretic issues relevant to the development of efficient approximate solutions to computationally difficult problems.

IMPORTANT DATES

Submissions: May 4, 2023, 18:00 EDT (UTC-4)
Notifications: June 26, 2023
Camera ready: July 10, 2023

TOPICS

Papers are solicited in all research areas related to randomization and approximation, including but not limited to:

RANDOM

- design and analysis of randomized algorithms
- randomized complexity theory
- pseudorandomness and derandomization
- random combinatorial structures
- random walks/Markov chains
- expander graphs and randomness extractors
- probabilistic proof systems
- random projections and embeddings
- error-correcting codes
- average-case analysis
- smoothed analysis
- property testing
- computational learning theory
- (pseudo)randomness in cryptography and data privacy
- (pseudo)randomness and quantum information

APPROX

- approximation algorithms
- hardness of approximation
- small space, sub-linear time and streaming algorithms
- online algorithms
- approaches that go beyond worst-case analysis
- distributed and parallel approximation
- embeddings and metric space methods
- mathematical programming methods
- spectral methods
- combinatorial optimization
- algorithmic game theory, mechanism design and economics
- computational geometric problems
- approximate learning

SUBMISSION SERVERS

RANDOM: https://random2023.hotcrp.com/
APPROX: https://easychair.org/conferences/?conf=approx2023

Submissions must be received by **18:00 (EDT) on May 4, 2023** to be considered.

Submission Format: Submissions, in PDF, should start with the title of the paper, followed by a 1-2 paragraph abstract summarizing the paper's contributions. This should be followed by a technical exposition on single-spaced, single-column pages, letter-size paper, using page numbers, at least 1-inch margins all around, and at least 11-point font. The first 10 pages should contain a clear presentation of the main technical and conceptual ideas underlying the results, including the motivation behind the paper and a clear comparison with related work (not including the references). The submission should be accessible to a wide variety of researchers in theoretical computer science and discrete mathematics. There is no page limit, but any material beyond the first 10 pages will be read at the sole discretion of the program committee.

Submission PDFs should not indicate the authors' names. PC members will still be able to access author names in the reviewing process if they feel they need to; the intent of this procedure is to make it easier for PC members and reviewers to avoid unconscious biases. Authors are free (and encouraged) to post submissions on web pages, arXiv, etc.

Work that has been previously published in another conference proceedings or journal, or which will be published before the end of the conference, will not be considered for acceptance. Simultaneous submission of the same (or an overlapping) paper to RANDOM/APPROX and to another conference with published proceedings is not allowed.

PROCEEDINGS

Accepted papers will be published in the online proceedings of the conference in the Leibniz International Proceedings in Informatics (LIPIcs) series, based at Schloss Dagstuhl. This guarantees perennial, free and easy electronic access, while the authors retain the rights over their work.

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