

RANDOM 2025 The 29th International Conference on Randomization and Computation

and

APPROX 2025 The 28th International Conference on Approximation Algorithms for Combinatorial Optimization Problems

<http://randomconference.com>

<http://approxconference.com>

August 11-13, 2025

Location: UC Berkeley, Berkeley, California, USA

CFP - Call for papers

The 29th International Workshop on Randomization and Computation (RANDOM 2025) and the 28th International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX 2025) will be held in person in Berkeley, California, USA.

RANDOM 2025 focuses on applications of randomness to computational and combinatorial problems while APPROX 2025 focuses on algorithmic and complexity theoretic issues relevant to the development of efficient approximate solutions to computationally difficult problems.

IMPORTANT DATES

Submissions: May 8, 2025, AoE Time Zone

Notifications: July 1, 2025

Camera ready: July 15, 2025

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
- sublinear-time and local algorithms
- 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://easychair.org/conferences/?conf=random2025> (to be opened soon)

APPROX: <https://easychair.org/my/conference?conf=approx2025> (to be opened soon)

Submissions must be received by **May 8, 2025, AoE Time Zone** to be considered.

Submission Format: Submissions, in PDF, should start with a title page containing the title of the paper, each author's name, affiliation, and e-mail address, and a 1-2 paragraph abstract summarizing the paper's contributions. The title page 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, following the title page, 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 title page and the following 10 pages will be read at the sole discretion of the program committee.

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.

ATTENDANCE POLICY

At least one author of each accepted paper should attend the conference in person to present the work. An exception to this policy may be granted in case of unavoidable visa issues, in which case the paper will still be included in the proceedings, and a recorded talk video will be made available online, but the paper will not be given a presentation slot at the in-person event. Therefore, please make sure to make travel arrangements well in advance to attend the conference, especially if you need a visa for entering the United States of America.

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. We also expect that authors of accepted papers make a full version of their paper available online by the conference date.

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