

RANDOM 2018

The 22nd International Conference on
Randomization and Computation

and

APPROX 2018

The 21st International Conference on
Approximation Algorithms for
Combinatorial Optimization Problems

<http://cui.unige.ch/tcs/random-approx/>

Aug. 20-22, 2018

Princeton University, New Jersey

CFP - Call for papers

SCOPE:

The 22nd International Conference on Randomization and Computation (RANDOM'2018) and the 21st International Conference on Approximation Algorithms for Combinatorial Optimization Problems (APPROX'2018) will be held on August 20-22, 2018 at Princeton University, New Jersey.

RANDOM'2018 focuses on applications of randomness to computational and combinatorial problems while APPROX'2018 focuses on algorithmic and complexity theoretic issues relevant to the development of efficient approximate solutions to computationally difficult problems.

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

APPROX

- Design and analysis of approximation algorithms
- Hardness of approximation
- Small space, sub-linear time and streaming algorithms
- Embeddings and metric space methods
- Mathematical programming methods
- Combinatorial problems in graphs and networks
- Algorithmic game theory and economics
- Computational geometric problems
- Approximate learning
- Online algorithms
- Approaches that go beyond worst-case analysis
- Other applications

IMPORTANT DATES :

Submissions: April 20, 2018

Notifications: June 1, 2018

Camera ready: June 11, 2018

SUBMISSIONS :

Abstract Format: Electronic submissions are solicited. Please consult the following servers:

For submission of APPROX papers: <http://www.easychair.org/conferences/?conf=approx2018>

For submission of RANDOM papers: <http://www.easychair.org/conferences/?conf=random2018>

Note: You will be asked to login using an EasyChair account. Directions on how to register for such an account are available at the submission servers (you may also have an old account from a previous conference submission).

The submission must be received by **15:00pm (PDT) of April 20th** for your submission to be considered. Submission Format: Submissions should start with the title of the paper, each author's name, affiliation, and e-mail address, followed by a one-paragraph summary of the results to be presented. This should then be followed by a technical exposition on single-spaced pages on letter-size paper, using reasonable margins and at least 11-point font. The first 10 pages should contain the main ideas and techniques used to achieve the results including motivation and a clear comparison with related work (not including the references). There is no page limit but any material beyond the first 10 pages will be read at the sole discretion of the program committee. Simultaneous submission to other conferences 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. Further detail will be available early January at the conference website. Previous proceedings of APPROX appeared as LNCS 1444, 1671, 1913, 2129, 2462, 2764, 3122, 3624, 4110 and 4627 while previous proceedings of RANDOM appeared as LNCS 1269, 1518, 1671, 2129, 2483, 2764, 3122, 3624, 4110, and as Proceedings in Informatics 8.

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