

## **RANDOM 2020**

The 24<sup>th</sup> International Conference on  
Randomization and Computation  
and

## **APPROX 2020**

The 23<sup>rd</sup> International Conference on  
Approximation Algorithms for  
Combinatorial Optimization Problems

<http://randomconference.wordpress.com>

<http://approxconference.wordpress.com>

**August 17-19, 2020**

**U. Washington, Seattle**

### **CFP - Call for papers**

#### **SCOPE**

The 24<sup>th</sup> International Workshop on Randomization and Computation (RANDOM 2020) and the 23<sup>rd</sup> International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX 2020) will be held on August 17-19, 2020 at the University of Washington, Seattle.

RANDOM 2020 focuses on applications of randomness to computational and combinatorial problems while APPROX 2020 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**

- 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

## **IMPORTANT DATES**

**Submissions:** April 24, 2020

**Notifications:** June 11, 2020

**Camera ready:** June 22, 2020

## **SUBMISSIONS**

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

For submission of APPROX papers: <http://www.easychair.org/conferences/?conf=approx2020>

For submission of RANDOM papers: <http://www.easychair.org/conferences/?conf=random2020>

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 24, 2020** 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, page numbers, 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 except as explained below.

**Dual submission with CCC 2020 for RANDOM 2020:** The CCC 2020 notification deadline falls one week after the RANDOM conference deadline. We will allow submissions that are substantially similar to those submitted to CCC 2020 with the understanding that the authors will withdraw the RANDOM submission if the CCC submission is accepted. The authors will also have to declare such dual submissions through the submission server at the time of submission.

## **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.

### **RANDOM Program Chair**

Raghu Meka, *UCLA*

<mailto:raghuvardhan@gmail.com>

### **APPROX Program Chair**

Jarosław Byrka, *University of Wrocław*

<mailto:jby@cs.uni.wroc.pl>

### **Local Organizing Committee Chair**

Yin-Tat Lee, *University of Washington*

<mailto:yintat@uw.edu>

## **RANDOM Steering Committee**

Oded Goldreich, *Weizmann*  
Cris Moore, *SFI*  
Anup Rao, *U Washington*  
Omer Reingold, *Stanford*, Steering Committee Chair  
Dana Ron, *Tel Aviv University*  
Ronitt Rubinfeld, *MIT*  
Amit Sahai, *UCLA*  
Ronen Shaltiel, *U Haifa*, Publicity Chair  
Alistair Sinclair, *UC Berkeley*  
Paul Spirakis, *U Liverpool*

## **APPROX Steering Committee**

Klaus Jansen, *U Kiel*  
Samir Khuller, *Northwestern University (Chicago)*  
Monaldo Mastrolilli, *IDSIA*  
László A. Végh, *LSE*

## **PROGRAM COMMITTEES**

### **RANDOM**

Nima Anari, *Stanford University*  
Eshan Chattopadhyay, *Cornell University*  
Gil Cohen, *Tel Aviv University*  
Parikshit Gopalan, *VmWare Research*  
Praladh Harsha, *Tata Institute of Fundamental Research*  
Sam Hopkins, *University of California, Berkeley*  
Valentine Kabanets, *Simon Fraser University*  
Gautam Kamath, *University of Waterloo*  
Tali Kaufman, *Bar-Ilan University*  
Yin-Tat Lee, *University of Washington*  
Sepideh Mahabadi, *TTI Chicago*  
Raghu Meka, *UCLA, PC chair*  
Jelani Nelson, *University of California, Berkeley*  
Ryan O'Donnell, *Carnegie Mellon University*  
Ilya Razenshteyn, *Microsoft Research*  
Barna Saha, *University of California, Berkeley*  
Tselil Schramm, *Stanford University*

Madhu Sudan, *Harvard University*  
Avishay Tal, *University of California, Berkeley*  
Eric Vigoda, *Georgia Tech University*  
Mary Wootters, *Stanford University*

## **APPROX**

Nikhil Bansal, *CWI & TU Eindhoven*  
Jarosław Byrka, *University of Wrocław, PC chair*  
Andreas Emil Feldmann, *Charles University in Prague*  
Naveen Garg, *IIT Delhi*  
Anupam Gupta, *Carnegie Mellon*  
Pasin Manurangsi, *Google Research*  
Evangelos Markakis, *AUEB, Athens*  
Nicole Megow, *University of Bremen*  
Marcin Mucha, *University of Warsaw*  
Harald Räcke, *TU Munich*  
Laura Sanità, *TU Eindhoven & University of Waterloo*  
Chaitanya Swamy, *University of Waterloo*  
Jakub Tarnawski, *Microsoft Research*  
Anke van Zuylen, *William and Mary*  
David Williamson, *Cornell*