

## RANDOM 2017

The 21<sup>st</sup> International Workshop on  
Randomization and Computation

and

## APPROX 2017

The 20<sup>th</sup> International Workshop on  
Approximation Algorithms for  
Combinatorial Optimization Problems

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

**Aug. 16-18, 2017**

**UC Berkeley, California**

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

#### **SCOPE :**

The 21<sup>st</sup> International Workshop on Randomization and Computation (RANDOM'2017) and the 20<sup>th</sup> International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX'2017) will be held on August 16-18, 2017 at the UC Berkeley, California.

RANDOM'2017 focuses on applications of randomness to computational and combinatorial problems while APPROX'2017 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
- 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 21, 2017

**Notifications:** June 2 ,2017

**Camera ready:** June 19, 2017

## **SUBMISSIONS :**

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

For submission of APPROX papers: <http://www.easychair.org/conferences/?conf=approx2017>

For submission of RANDOM papers: <http://www.easychair.org/conferences/?conf=random2017>

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 21<sup>st</sup>** 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, 4627 and as Proceedings in Informatics 8.

### **PROGRAM CHAIRS :**

#### **RANDOM**

Santosh Vempala  
*Gatech, USA*  
vempala@gatech.edu

#### **APPROX**

David Williamson  
*Cornell University, USA*  
davidpwilliamson@cornell.edu

#### **Local Organizing Committee Chair:**

Neha Dave,  
Berkeley, USA  
neha\_dave@hotmail.com

### **WORKSHOP CHAIRS :**

José Rolim - *University of Geneva*  
e-mail: jose.rolim@unige.ch  
Klaus Jansen - *University of Kiel*  
e-mail: kj@informatik.uni-kiel.de

## **PROGRAM COMMITTEES :**

### **RANDOM**

Shipra Agrawal	Columbia
Arnab Bhattacharya	IISc
Sebastien Bubeck	MSR
Alan Frieze	CMU
Anna Gilbert	Michigan
Thomas Hansen	Aarhus
Anna Karlin	UW
Yin Tat Lee	MSR and UW
Ankur Moitra	MIT
Richard Peng	GaTech
Will Perkins	Birmingham
Barna Saha	UMass
Alistair Sinclair	Berkeley
Santosh Vempala	GaTech
David Woodruff	IBM Almaden

### **APPROX**

Nikhil Bansal	Eindhoven
Siu On Chan	CUHK
Moses Charikar	Stanford
Michel Goemans	MIT
Venkatesan Guruswami	CMU
Sungjin Im	UC Merced
Sanjeev Khanna	U Penn
Jochen Koenemann	Waterloo
Shi Li	Buffalo
Nicole Megow	Bremen
Viswanath Nagarajan	Michigan
Laura Sanità	Waterloo
Ola Svensson	EPFL
Seeun William Umboh	Eindhoven
David Williamson	Cornell, CHAIR
Anke van Zuylen	William and Mary

### **CONFERENCE WEB PAGE**

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