# APPROX 2010 and RANDOM 2010

13th Intl. Workshop on Approximation Algorithms for Combinatorial Optimization Problems - APPROX 2010

14th Intl. Workshop on Randomization and Computation - RANDOM 2010

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

1-3 September 2010 UPC Barcelona, Spain

## Call for papers

#### **SCOPE**

13th Intl. Workshop on Approximation Algorithms for Combinatorial Optimization Problems - APPROX 2010

14th Intl. Workshop on Randomization and Computation - RANDOM 2010

1-3 September 2010 UPC Barcelona, Spain

The 13th. International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX'2010), and the 14th. International Workshop on Randomized Techniques in Computation (RANDOM'2010) will be held in UPC Barcelona, Spain, on 1-3 September, 2010.

APPROX'2010 focuses on algorithmic and complexity theoretic issues relevant to the development of efficient approximate solutions to computationally difficult problems, while RANDOM'2010 focuses on applications of randomness computational to and combinatorial problems. RANDOM'2010 is the fourteenth workshop in the series: APPROX'2010 is the thirteenth in the series.

### **TOPICS**

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

# **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
- game theory, markets, and economic applications
- geometric problems
- packing, covering, and scheduling
- approximate learning
- other applications

# **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

# **SUBMISSIONS**

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

For submission of APPROX papers:
http://www.easychair.org/confere
nces/?conf=approx10

For submission of RANDOM papers: <a href="http://www.easychair.org/confere">http://www.easychair.org/confere</a> nces/?conf=random10

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 postscript must be received by 17:00pm (PDT) of April 18 for your submission to be considered.

Abstract Format: Authors should submit an extended abstract (not a full paper). An abstract 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 of the main ideas and techniques used to achieve these results including motivation and a clear comparison with related work.

The abstract should not exceed 10 single-spaced pages on letter-size paper, using reasonable margins and at least 11-point font (not including the references). If the authors believe that more details are essential to substantiate the main claims of the paper, they may include a clearly marked appendix that will be read at the discretion of the program committee.

### Simultaneous submission

Simultaneous submission to other conferences with published proceedings is not allowed.

## **PROCEEDINGS**

Proceedings will be published in the Springer-Verlag series Lecture Notes in Computer Science.

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.

### **IMPORTANT DATES**

Submissions: April 18

Notifications: June 12

Camera ready: June 23

Conference: September 1-3

#### PROGRAM COMMITTEES

### **Approx**

Chandra Chekuri, University of Illinois, Urbana-Champaign.

Uriel Feige, The Weizmann Institute.

Pierre Fraigniaud, CNRS and University Paris Diderot.

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Claire Mathieu, Brown University.

Zeev Nutov, The Open University of Israel.

Giuseppe Persiano, University of Salerno.

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David P. Williamson, Cornell University.

### Random

Dimitris Achlioptas, UC Santa Cruz and University of Athens.

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Anna Gal, University of Texas at Austin.

Valentine Kabanets, Institute for Advanced Study and Simon Fraser University.

Swastik Kopparty, MIT.

Michael Krivelevich, Tel-Aviv University.

Sofya Raskhodnikova, Pennsylvania State University.

Ran Raz, Weizmann Institute.

Atri Rudra, University at Buffalo, State University of New York.

Rocco Servedio, Columbia University.

Ronen Shaltiel, University of Haifa (chair).

Angelika Steger, ETH Zurich.

Christopher Umans, California Institute of Technology.

Eric Vigoda, Georgia Tech.

Sergey Yekhanin, Microsoft Research Silicon Valley.

### **PROGRAM CHAIRS**

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# **Local Chairs**

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# **CONFERENCE WEB PAGE**

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