# APPROX 2014 and RANDOM 2014

17th Intl. Workshop on Approximation Algorithms for Combinatorial Optimization Problems - APPROX 2014

&

18th Intl. Workshop on Randomization and Computation - RANDOM 2014

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

Sep. 4-6, 2014 UPC, Barcelona

# Call for papers

SCOPE

17th Intl. Workshop on Approximation Algorithms for Combinatorial Optimization Problems - APPROX 2014 18th Intl. Workshop on Randomization and Computation - RANDOM 2014

The 17th. International Workshop on Approximation Algorithms for Combinatorial Optimization Problems (APPROX'2014), and the 18th. International Workshop on Randomization and Computation (RANDOM'2014) will be held in 4-6 September 2014 at Barcelona.

APPROX'2014 focuses on algorithmic and complexity theoretic issues relevant to the development of efficient approximate solutions to computationally difficult problems, while RANDOM'2014 focus on applications of randomness to computational and combinatorial problems. RANDOM'2014 is the eighteenth workshop in the series; APPROX'2014 is the seventeenth 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
- algorithmic game theory and economics
- computational geometric problems
- approximate learning
- online algorithms
- approaches that go beyond worst case analysis
- 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/conferences/?conf=approx2014 For submission of RANDOM papers: http://www.easychair.org/conferences/?conf=random2014 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 17:00pm (PDT) of April 17 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.

## IMPORTANT DATES

Submissions: April 17th, Thursday Notifications: June 6th, Friday Camera ready: June 20th, Friday

#### PROGRAM COMMITTEES

Approx

Niv Buchbinder - Tel-Aviv University Deeparnab Chakrabarty - Microsoft Research, India Siu On Chan - Microsoft Research, New England Shuchi Chawla - University of Wisconsin Eden Chlamtac - Ben Gurion University Nikhil Devanur (Chair) - Microsoft Research, Redmond Alina Ene - Princeton University Konstantinos Georgiou - University of Waterloo Telikepalli Kavitha - Indian Institute of Science, Bangalore Ken Ichi Kawarabayashi - National Institute of Informatics, Tokvo Jochen Koenemann - University of Waterloo Amit Kumar - Indian Institute of Technology, New Delhi Konstantin Makarychev - Microsoft Research, Redmond Debmalya Panigrahi - Duke University Thomas Rothvoss - Massachusetts Institute of Technology Barna Saha - AT&T Shannon Research Laboratory, New Jersey Bruce Shepherd - MCGill University Aravind Srinivasan - University of Maryland David Williamson - Cornell University

## Random

Louigi Addario-Berry - MCGill University, Canada Nayantara Bhatnagar - University of Delaware Amin Coja-Oghlan - Goethe University, Germany David Galvin - University of Notre Dame, Indiana Valentine Kabanets - Simon Fraser University, Canada Michael Molloy - University of Toronto Cris Moore (Chair) - Santa Fe Institute Assaf Naor - New York University Krzysztof Onak - IBM T.J. Watson Research Center Dana Ron - Tel-Aviv University Alex Russell - University of Connecticut Dominik Scheder - Aarhus University Devavrat Shah - Massachusetts Institute of Technology

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Perla Sousi - University of Cambridge
Mario Szegedy - Rutgers University
Amnon Ta-Shma - Tel-Aviv University
Thomas Vidick - Newton Institute, Cambridge, UK
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## Program Chairs

APPROX Nikhil Devanur - Microsoft Research, Redmond email: nikdev@microsoft.com

## RANDOM

Cris Moore - Santa Fe Institute email: mmore@santafe.edu

Workshop Chairs Jos**é** Rolim, U. of Geneva e-mail: jose.rolim@unige.ch Klaus Jansen, U. of Kiel e-mail: <u>kj@informatik.uni-kiel.de</u>

Organizing Comitee Chair Carme Alvarez, *Universitat Polit*Ècnica de Catalunya email:alvarez@lsi.upc.edu

CONFERENCE WEB PAGE http://cui.unige.ch/tcs/random-approx/