CALL FOR PAPERS - ICALP 2011 38TH INTERNATIONAL COLLOQUIUM ON AUTOMATA, LANGUAGES AND PROGRAMMING JULY 4-8, 2011, ZÜRICH, SWITZERLAND http://icalp11.inf.ethz.ch/



The 38th International Colloquium on Automata, Languages and Programming, the main conference and annual meeting of the European Association for Theoretical Computer Science (EATCS), will take place from the 4th to the 8th of July 2011 in Zürich, Switzerland. The main conference will be preceded and/or followed by a series of workshops.

Papers presenting original research on all aspects of theoretical computer science are sought. Typical but not exclusive topics of interest are:

TRACK A: ALGORITHMS, COMPLEXITY AND GAMES

Algorithmic Game Theory - Approximation Algorithms - Combinatorial Optimization -Combinatorics in Computer Science - Computational Biology - Computational Complexity -Computational Geometry -Cryptography -Data Structures - Design and Analysis of Algorithms - Machine Learning - Parallel, Distributed and External Memory Computing -Randomness in Computation - Quantum Computing

Invited speakers:

- Q Rajeev Alur (Univ. Pennsylvania)
- Thore Husfeldt (ITU Copenhagen)
- Q Catuscia Palamidessi (INRIA Saclay and LIX)
- Ronen Shaltiel (Univ. Haifa)

TRACK B: LOGIC, SEMANTICS, AUTOMATA AND THEORY OF PROGRAMMING

Algebraic and Categorical Models - Automata Theory, Formal Languages - Emerging and Non-standard Models of Computation - Databases, Semi-Structured Data and Finite Model Theory - Principles of Programming Languages - Logics, Formal Methods and Model Checking - Models of Concurrent, Distributed, and Mobile Systems - Models of Reactive, Hybrid and Stochastic Systems - Program Analysis and Transformation - Specification, Refinement and Verification - Type Systems and Theory, Typed Calculi

Best paper awards:

As in previous editions of ICALP, there will be best paper and best student paper awards for each track of the conference. In order to be eligible for a best student paper award, a paper should be authored only by students and should be marked as such upon submission. TRACK C: FOUNDATIONS OF NETWORKED COMPUTATION: MODELS, ALGORITHMS AND INFORMATION MANAGEMENT

Algorithmic Aspects of Networks -E-commerce, Privacy, Spam - Formal Methods for Network Information Management -Foundations of Trust and Reputation in Networks - Algorithms and Models for Mobile and Wireless Networks and Computation -Models of Complex Networks - Models and Algorithms for Global Computing - Network Economics and Incentive-Based Computing Related to Networks - Models and Algorithms for Networks of Low Capability Devices -Overlay Networks and P2P Systems - Social Networks - Specification, Semantics, Synchronization of Networked Systems - Theory of Security in Networks and Distributed Computing - Web Searching and Ranking -Web Mining and Analysis

Important Dates:

- Submission Deadline: Feb 15, 2011
- Q Author Notification: Apr 12, 2011
- Gereinal Manuscript Due: April 28, 2011

Submission Guidelines:

Authors are invited to submit an extended abstract of no more than 12 pages in LNCS style presenting original research on the theory of Computer Science. Submissions should indicate to which track (A, B, or C) the paper is submitted. No prior publication or simultaneous submission to other publication outlets (either a conference or a journal) is allowed. The proceedings will be published in the Lecture Notes in Computer Science Series by Springer-Verlag.

It is strongly recommended that submissions adhere to the specified format and length. Submissions that are clearly too long may be rejected immediately. Material other than the abstract, references and the first 12 pages may be considered as supplementary and will be read at the committee's discretion.

Programm Committees:

TRACK A: ALGORITHMS, COMPLEXITY AND GAMES

Nikhil Bansal, IBM Watson Harry Buhrman, CWI Amsterdam Marek Chrobak, UC Riverside Martin Dietzfelbinger, TU Ilmenau Thomas Erlebach, Univ. Leicester Fedor V. Fomin, Univ. Bergen Dimitris Fotakis. National TU Athens Ricard Gavaldà, UPC Barcelona Russell Impagliazzo, UC San Diego Juhani Karhumäki, Univ. Turku Howard Karloff. AT&T Labs - Research Michal Koucký, ASCR Prague Dariusz Kowalski, Univ. Liverpool Stefano Leonardi, Sapienza Univ. Rome Gonzalo Navarro, Univ. Chile Rolf Niedermeier. TU Berlin Rafail Ostrovsky, UC Los Angeles Günter Rote, FU Berlin Christian Scheideler, Univ. Paderborn Maria Serna, UPC Barcelona Jiří Sgall, Charles Univ. Prague (chair) Gábor Tardos, Simon Fraser Univ. Jan Vondrák, IBM Almaden Uli Wagner, ETH Zürich Prudence W. H. Wong, Univ. Liverpool

TRACK B: LOGIC, SEMANTICS, AUTOMATA AND THEORY OF PROGRAMMING

Luca Aceto, Revkjavik Univ. (chair) Anuj Dawar, Univ. Cambridge Rocco De Nicola, Univ. Firenze Zoltán Ésik, Univ. Szeged Wan Fokkink, VU Amsterdam Herman Geuvers, Univ. Nijmegen Radha Jagadeesan, DePaul Univ. Jarkko Kari, Univ. of Turku Joost-Pieter Katoen, RWTH Aachen Orna Kupferman, Hebrew Univ. Jerusalem Francois Laroussinie, Paris Diderot Carroll Morgan, UNSW Sydney Anca Muscholl, LaBRI Bordeaux Hanne Riis Nielson, DTU Copenhagen Prakash Panangaden, McGill Univ. Joachim Parrow, Uppsala Univ. Reinhard Pichler, TU Wien Roberto Segala, Univ. Verona Helmut Seidl. TU München Alex Simpson, Univ. Edinburgh Pawel Urzyczyn, Warsaw Univ.

Conference Chairs:

Michael Hoffmann, Juraj Hromkovič, Ueli Maurer, Angelika Steger, Emo Welzl, Peter Widmayer, ETH Zürich **Contact:** <icalp11@inf.ethz.ch> TRACK C: FOUNDATIONS OF NETWORKED COMPUTATION: MODELS, ALGORITHMS AND INFORMATION MANAGEMENT

Gilles Barthe. IMDEA Madrid András Benczúr, Eötvös Univ. Budapest Edith Cohen, AT&T Labs - Research Joan Feigenbaum, Yale Univ. Amos Fiat. Tel Aviv Univ. Lisa Fleischer, Dartmouth College Georg Gottlob, Oxford Univ. Monika Henzinger, Univ. Wien (chair) Bruce Maggs, Duke Univ. Massimo Merro, Univ. Verona Vahab Mirrokni, Google New York Alessandro Panconesi, Sapienza Univ. Rome Giuseppe Persiano, Univ. Salerno Anna Philippou, Univ. Cyprus Davide Sangiorgi, Univ. Bologna and INRIA Vladimiro Sassone, Univ. Southhampton Andrew Tomkins, Google Mountain View Dorothea Wagner, KIT Roger Wattenhofer, ETH Zürich Ingmar Weber, Yahoo Barcelona

Conference Secretariat:

Andrea Salow, ETH Zürich