CALL FOR PAPERS
ICALP 2004
31st International Colloquium on Automata, Languages and Programming
July 12–16, 2004, Turku, Finland

CONFERENCE CHAIR
Juhani Karhumäki
Department of Mathematics and Turku Centre for Computer Science
University of Turku
FIN-20014 Turku, Finland
e-mail: karhumak@cs.uta.fi

INVITED SPEAKERS
Joint ICALP-LICS
R. Harper (Carnegie Mellon)
A. Razborov (Princeton & Moscow)
M. Yamakakis (Stanford)

ICALP
P. Fraigniaud (INRIA)
M. Henzinger (Google)
M. Hofmann (Münich)
W. Rytter (Warsaw & NJIT)

PROGRAM COMMITTEE

Track A
A. Atserias, Barcelona (ES)
G. Brodal, Aarhus (DK)
J. Cassaigne, Marseille (FR)
J. Díaz, Barcelona (ES), chair
R. Fleischer, Hong Kong (HK)
H. Gabow, Boulder (US)
L. Goldberg, Warwick (UK)
J. Hromkovic, Aachen (DE)
G. Italiano, Roma (IT)
T. Jiang, Riverside (US)
C. Kaklamanis, Patras (GR)
J. Kar, Turku (FI)
C. Moore, Santa Fe (US)
P. Pudlak, Prague (CZ)
P. Raghavan, Verity, Stanford (US)
M. Santha, Paris (FR)
B. Voeling, Dortmund (DE)
G. Woeginger, Twente (NL)
M. Young, Columbia U. (US)

Track B
R.-J. Back, Turku (FI)
P.-L. Curien, Paris (FR)
A. Gordon, Microsoft, Cambridge (UK)
S. Hayashi, Kōbe (JP)
T. Henzinger, Berkeley (US)
M. Hofmann, Munich (DE)
B. Jacobs, Nijmegen (NL)
E. Moggi, Genova (IT)
C. Palamidessi, University Park, Penn. (US)
J. Parrow, Uppsala (SE)
B. Pierce, Philadelphia (US)
A. Rabinovich, Tel Aviv (IL)
D. Samella, Edinburgh (UK), chair
W. Thomas, Aachen (DE)
I. Walukiewicz, Bordeaux (FR)

The 31st International Colloquium on Automata, Languages and Programming sponsored by the European Association of Theoretical Computer Science will take place in Turku, on July 12–16, 2004. It is organised at Turku University by the Department of Mathematics and Turku Centre for Computer Science. ICALP04 is colocated with the 19th International Conference on Logic in Computer Science (LICS04).

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

- **Track A:**
  - Algorithmic aspects of parallel and distributed computing
  - Algorithms and data structures
  - Algorithms and models for large networks
  - Algorithms for computationally hard problems
  - Automata theory and formal languages
  - Bioinformatics
  - Computational complexity
  - Combinatorics and structures in Computer Science
  - Cryptography
  - Machine learning
  - Molecular computing, neural and evolutionary algorithms
  - Proof complexity
  - Quantum computing

- **Track B:**
  - Algebraic and categorical models
  - Applications of automata in logic
  - Concurrency, mobility and distributed systems
  - Databases, semi-structured data and finite model theory
  - Logics and their applications
  - Principles of programming languages
  - Program logics, formal methods and model checking
  - Security analysis and verification
  - Semantics of programming languages
  - Specification, refinement and verification
  - Type systems and typed calculi

**SUBMISSIONS**
Authors are invited to submit a paper of no more than 12 pages in LNCS-style, presenting original research on the theory of computer science, see http://www.math.uta.fi/ICALP04/ for submission details. Submissions should indicate which track the paper is submitted to. No simultaneous submission to other conferences with published proceedings is allowed. Accepted papers will be published in the Lecture Notes in Computer Science by Springer.

**CONTACT ADDRESS**
For further information see: http://www.math.uta.fi/ICALP04/ or contact: ICALP04@cs.uta.fi, karhumak@cs.uta.fi

**IMPORTANT DATES**
- Workshop proposals: November 30, 2003
- Submission: February 8, 2004
- Notification: March 31, 2004
- Final version: April 27, 2004