



8th IFIP International Conference on Theoretical Computer Science TCS 2014

September 1–3, 2014 Rome, Italy

<http://www.cyprusconferences.org/tcs2014/>

Held in conjunction with the

25th Conference on Concurrency Theory (CONCUR 2014)

Under the patronage of the International Federation of Information Processing (IFIP), since year 2000 the IFIP Technical Committee 1 (Foundations of Computer Science) has organized a series of biannual international conferences in Theoretical Computer Science. After Sendai (2000), Montreal (2002), Toulouse (2004), Santiago (2006), Milano (2008), Brisbane (2010), and Amsterdam (2012), the 8th edition will be held in Rome in September 2014, in cooperation with the IFIP Working Group 2.2 (Formal Description of Programming Concepts) and in conjunction with the 25th Conference on Concurrency Theory. We call for papers in all areas of Theoretical Computer Science: they will be evaluated by two committees:

Track A Algorithms, Complexity and Models of Computation

Track B Logic, Semantics, Specification and Verification.

Topics

Suggested, but not exclusive, topics of interest include:

Track A - analysis and design of algorithms; automata and formal languages; cellular automata and systems; combinatorial, graph and optimization algorithms; computational learning theory; computational complexity; computational geometry; cryptography; descriptive complexity; evolutionary and genetic computing; experimental algorithms; mobile computing; molecular computing and algorithmic aspects of bioinformatics; network computing; neural computing; parallel and distributed algorithms; probabilistic and randomized algorithms; quantum computing; structural information and communication complexity.

Track B - automata theory; automated deduction; constructive and non-standard logics in computer science; concurrency theory and foundations of distributed and mobile computing; database theory; finite model theory; formal aspects of program analysis, foundations of hybrid and real-time systems; lambda and combinatory calculi; logical aspects of computational complexity; modal and temporal logics; model checking and verification; probabilistic systems; logics and semantics of programs; foundations of security; term rewriting; specifications; type, proof and category theory in computer science.

Invited Speakers

Track A Giuseppe F. Italiano

Università di Roma "Tor Vergata"

Track B Jane Hillstone

University of Edinburgh

Submission Guidelines

Authors are invited to submit an extended abstract of at most 15 pages (LNCS style with at least 11-point font size) to arrive before April 27, 2014. If more space is needed, a clearly marked appendix, to be read at the discretion of the program committee, may be included if desired. Submission will be handled by *EasyChair*.

Further information and submission details can be found on the Conference web page. Simultaneous submissions to other conferences with published proceedings are not allowed.

Proceedings

The conference proceedings will be published by Springer-Verlag in Lecture Notes in Computer Science (LNCS) series. Selected papers from TCS 2014 will be invited to a special issue of the Journal *Theoretical Computer Science*.

Important Dates

Deadline for submission: April 27, 2014.

Notification of acceptance: June 25, 2014.

Final manuscript due: July 6, 2014.

Conference: September 1–3, 2014.

Conference Co-Chairs

Daniele Gorla *Sapienza Università di Roma*

Rossella Petreschi *Sapienza Università di Roma*

Program Committees

Track A

Cristian Calude *University of Auckland*

Josep Diaz (Chair) *UPC Barcelona*

Irene Finocchi *Sapienza Università di Roma*

Paola Flocchini *University of Ottawa*

Aristides Gionis *Aalto University Helsinki*

Mordecai Golin *Hong Kong University of Tech.*

Juhani Karhumäki *Turku University*

Massimo Melucci *Università di Padova*

Elvira Mayordomo *Universidad de Zaragoza*

Friedhelm Meyer auf der Heide *Univ. of Paderborn*

Pekka Orponen *Aalto University Helsinki*

Giuseppe Persiano *Università di Salerno*

Géraud Sénizergues *Université Bordeaux 1*

Olivier Serre *CNRS / Université Paris 7*

Paul Spirakis *University of Liverpool*

Osamu Watanabe *Tokyo Inst. of Technology*

Peter Widmayer *ETH Zurich*

Track B

Jos Baeten *CWI Amsterdam*

Lars Birkedal *Aarhus University*

Andrei Bulatov *Simon Fraser University*

James Cheney *University of Edinburgh*

Ugo Dal Lago *Università di Bologna*

Josée Desharnais *Université Laval*

Jörg Endrullis Vrije *Universiteit Amsterdam*

Jérôme Feret *ENS Paris*

Marcelo Fiore *University of Cambridge*

Silvio Ghilardi *Università di Milano*

Benjamin Grégoire *INRIA Sophia*

Ichiro Hasuo *University of Tokyo*

Marieke Huisman, *University of Twente*

Jean Krivine *CNRS / Université Paris 7*

Radha Jagadeesan *DePaul University, Chicago*

Ivan Lanese *Università di Bologna*

Grigore Rosu *University of Illinois at U-C*

Davide Sangiorgi (Chair) *Università di Bologna*

Vladimiro Sassone *University of Southampton*

Igor Walukiewicz *CNRS / Université Bordeaux 1*

Steering Committee

Giorgio Ausiello *Sapienza Università di Roma*

Jos Baeten *CWI Amsterdam*

Jacques Sakarovitch *CNRS / Télécom ParisTech*