



# 8<sup>th</sup> 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

25<sup>th</sup> 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 8<sup>th</sup> 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 25<sup>th</sup> 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

To be announced

## 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*

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Friedhelm Meyer auf der Heide *Univ. of Paderborn*

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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*

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Jérôme Feret *ENS Paris*

Marcelo Fiore *University of Cambridge*

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Benjamin Grégoire *INRIA Sophia*

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Grigore Rosu *University of Illinois at U-C*

Davide Sangiorgi (Chair) *Università di Bologna*

Vladimiro Sassone *University of Southampton*

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