

# RTSOPS 2012: 3<sup>rd</sup> International Real-Time Scheduling Open Problems Seminar

Pisa, Italy, July 10th, 2012

Co-located with ECRTS 2012

**Seminar:** The 3rd International Real-Time Scheduling Open Problems Seminar (RTSOPS 2012) provides a venue for the exchange of ideas and the discussion of interesting unsolved problems in real-time scheduling. The format of the seminar encourages interaction between participants and provides ample time for relaxed discussions. The goal of the seminar is to promote a spirit of co-operation and collaboration within the real-time scheduling community.

RTSOPS 2012 is organized around presentation and collaboration sessions. Each presentation session provides the opportunity to hear about a number of unsolved problems in real-time scheduling, highlighted via brief presentations. The following collaboration session gives participants the opportunity to interact in small groups, exchange ideas with the presenters, explore how the problems might be solved, and take the first steps towards a solution.

In addition, authors of open problem submissions from previous years' RTSOPS are invited to submit short status reports on progress made towards a solution to their open problem. This year's seminar will include a session for presentation of such advances.

**Scope:** Real-time scheduling theory has provided a foundation for understanding and solving resource allocation and scheduling problems in systems that have real-time constraints. New fundamental results are needed to address recent advances and trends in real-time systems design. RTSOPS 2012 encompasses all aspects of real-time scheduling.

**Submissions:** RTSOPS 2012 invites extended abstracts of open problems in areas such as, but not limited to:

- Multiprocessor, uniprocessor and communications scheduling.
- New models for real-time systems
- Scheduling in cyber-physical systems
- Interactions between WCET analysis and scheduling

**Submission Details:** Extended abstracts (for either new open problems or status reports on previously-presented problems) for RTSOPS 2012 must be written in English, and not exceed two A4 pages in length in single column, 10pt format, including relevant references. The main purpose of the abstract for new open problem submissions should be to provide a clear description of the problem. Abstracts may be submitted describing well-known but as yet unsolved problems. However, all abstracts should contain some element of original work that has not been published before, for

example, a new problem, a new way of looking at an existing problem, new intuition or ideas on how a problem might be solved, possible frameworks for solutions, overviews of special cases that may be useful in solving a problem etc. Abstracts describing progress on an open problem presented at last year's RTSOPS should include a brief statement of the open problem and a description of the technical advances made towards a solution. Abstract submissions should be made electronically, in PDF format only via the Submission Page for RTSOPS 2012: <https://www.softconf.com/c/rtsops2012/>

Authors of accepted abstracts are expected to give a brief presentation of their open problem, and be prepared to work on the problem with other participants during the collaboration sessions. Instructions for preparing final copy and presentations will be given when the abstract is accepted. The seminar will also include a number of invited presentations on open problems. RTSOPS 2012 will publish proceedings as a seminar booklet.

By submitting an extended abstract, the authors agree and confirm that: neither this extended abstract nor a version close to it is under submission or will be submitted elsewhere before notification by RTSOPS 2012, and if accepted, at least one author will register for the RTSOPS 2012 seminar by the special registration deadline set in the notification of acceptance, and present the open problem at the seminar in person. Please note that extended abstracts that do not describe real-time scheduling problems will not be accepted. Submissions will be refereed for quality and relevance. Submissions exceeding the page limit may be rejected without review.

## Seminar co-chairs

Liliana Cucu-Grosjean INRIA Nancy-Grand Est, France  
Nathan Fisher Wayne State University, USA

## Steering Committee

Marko Bertogna Scuola Superiore S. Anna, Pisa, Italy  
Robert Davis University of York, UK  
Shelby Funk University of Georgia, USA  
Sathish Gopalakrishnan University of British Columbia, Canada

## Important Dates:

Submission deadline: 11<sup>th</sup> May 2012  
Notification of acceptance: 20<sup>th</sup> May 2012  
RTSOPS Seminar: 10<sup>th</sup> July 2012  
ECRTS Conference: 11<sup>th</sup>-13<sup>th</sup> July 2012