

# Workshop Program

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**8:30-8:45**     **Welcome**

**8:45-9:45**     **Keynote 1: Joyce Tokar, Pyrrhus Software, USA**

Opportunities and Challenges in Constructing Large Scale System of Systems

**9:45-10:00**     **Coffee break**

**10:00-11:45**     **Session 1: Interfaces and Schedulability Analysis**

**Chair: Robert Davis, University of York, UK**

**10:00-10:15**     **Bjorn Andersson**

*A Pseudo-Medium-Wide 8-Competitive Interface for Two-Level  
Compositional Real-Time Scheduling of Constrained-Deadline Sporadic  
Tasks on a Uniprocessor*

**10:15-10:30**     **Enrico Bini, Giorgio Buttazzo and Yifan Wu**

*Selecting the minimum consumed bandwidth of an EDF task set*

**10:30-10:45**     **Moris Behnam and Nathan Fisher**

*Subsystem-Interface Generation in the Presence of Shared Resources*

**10:45-11:00**     **Reinder J. Bril, Ugur Keskin, Moris Behnam and Thomas Nolte**

*Schedulability analysis of synchronization protocols based on overrun  
without payback for hierarchical scheduling frameworks revisited*

**11:00-11:15**     **Nicola Serreli, Giuseppe Lipari and Enrico Bini**

*Deadline assignment for component-based analysis of real-time  
transactions*

**11:15-11:45**     **Panel discussion I**

*Panel comprised of speakers from this session*

**11:45-13:00**     **Lunch**

**13:00-14:00**     **Keynote 2: Alan Burns, University of York, UK**

Openness, Efficiency and QoS-aware Flexibility: Issues for Online Composition

**14:00-14:15**     **Coffee break**

**14:15-15:45 Session 2: Composition of Complex Real-Time Systems**

**Chair: Harini Ramaprasad, Southern Illinois University Carbondale, USA**

**14:15-14:30 Azer Bestavros, Assaf Kfoury, Andrei Lapets and Michael Ocean**  
*Safe Compositional Network Sketches: Tool & Use Cases*

**14:30-14:45 Rui Santos, Alexandre Vieira, Ricardo Marau, Paulo Pedreiras, Arnaldo Oliveira and Luis Almeida**  
*Implementing Server-Based Communication within Ethernet Switches*

**14:45-15:00 Stefan Andrei and Albert Cheng**  
*Decomposition-based Verification of Linear Real-Time Systems Specifications*

**15:00-15:15 Shinya Umeno and Nancy Lynch**  
*Timeout Order Abstraction for Time-Parametric Verification of Loosely Synchronized Real-Time Distributed Systems*

**15:15-15:45 Panel discussion II**  
*Panel comprised of speakers from this session*

**15:45-16:00 Closing remarks**