

# Hybrid Systems: Computation and Control 2012

# Beijing, April 17-19, 2012 http://hscc2012.hscc-conference.org/

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#### **Conference Scope**

Hybrid Systems: Computation and Control is a leading, singletrack conference focusing on research into systems in which the interplay between discrete (or symbolic or switching) and continuous dynamical behaviors plays a key role. Such interplay often arises in embedded, reactive and cyber-physical systems, but also appears in other new contexts; for example systems biology, or mixed-signal electronic circuits. Academic and industrial researchers are invited to submit manuscripts detailing the latest developments in practice and theory pertaining to the analysis, design, control, optimization, verification, implementation and applications of such hybrid systems. Topics of interest include, but are not limited to:

- Models of heterogeneous systems;
- Computability and complexity issues;
- Real-time computing and control;
- Embedded and resource-aware control;
- Computation and control over wireless networks;
- Tools for analysis, verification, control, and design;
- Programming languages support and implementation;
- Modeling and analysis for applications and new domains, including automotive, communication networks, avionics, transportation networks, energy systems, mobile robotic networks, manufacturing, analog and mixed-signal electronics, systems biology, and other sciences.

**HSCC 2012** will be held as part of the fifth **CPSWeek** (Cyber-Physical Systems Week) collocating **HSCC**, **RTAS** (Real-Time and Embedded Technology and Applications Symposium), **IPSN** (International Conference on Information Processing in Sensor Networks), and **ICCPS** (International Conference on Cyber-Physical Systems). Proposals for workshops and tutorials are invited, and should be submitted through the **CPSWeek 2012** website.

#### **Submission Guidelines**

**<u>Regular papers</u>**. Papers of no more than ten pages (in ten point, twocolumn in ACM format) presenting original research that is unpublished and not submitted elsewhere can be submitted electronically in PDF format through the conference web site. Submitted papers will be reviewed by the program committee, and authors will be invited to submit brief rebuttals of the reviews before the final acceptances are made.

**Tool presentations**. Papers of no more than four pages (in ten point, two-column ACM format) describing the implemented tool and its novel features. A demonstration and/or poster is expected to accompany a tool presentation at the larger CPSWEEK demo session.

The proceedings of accepted papers will be published by **ACM**.

#### **Important Dates**

Submission deadline: October 14 October 21 Rebuttal phase: November 25-30 Author notification: December 16 Final version: January 16