International Workshop on

Runtime and Operating Systems for Supercomputers ROSS 12

Held in conjunction with ICS 2012, Venice, Italy, June 29, 2012

The complexity of node architectures in supercomputers increases as we cross petaflop milestones on the way towards Exascale. Increasing levels of parallelism in multi- and many-core chips and emerging heterogeneity of computational resources coupled with energy and memory constraints force a reevaluation of our approaches towards operating systems and runtime environments.

Call for Papers

The ROSS workshop, to be held as a full-day meeting at the ICS 2012 conference in Venice, Italy, focuses on principles and techniques to design, implement, optimize, or operate runtime and operating systems for supercomputers and massively parallel machines.

The **keynote** will be delivered by Timothy Roscoe from ETH Zurich, Switzerland.

Topics of interest:

* OS and runtime system scalability on many-node and multi/many-core systems
* specialized OSs for Supercomputing
* distributed/hybrid/partitioned OSs and runtime systems for Supercomputing
* fault tolerance
* system noise analysis and prevention
* interaction between middleware, runtime system, and the OS
* I/O resource management and forwarding
* parallel job startup
* memory management and emerging memory technologies
* real-time considerations for Supercomputing

Schedule and Submission Procedure

Submission deadline:	April 6, 2012 (extended)
Author notification:	May 7, 2012
Final papers due:	May 25, 2012
Workshop date:	June 29, 2012

The ROSS workshop proceedings will be published electronically along with the ICS conference proceedings via the ACM Digital Library. Submitted manuscripts should be formatted using the ACM SIG proceedings alternate format. Extensive documentation can be found at the ACM site (http://www.acm.org/sigs/publications/proceedings-templates).The maximum length is 8 pages. All papers must be in English. Please visit the workshop website (http://www.mcs.anl.gov/events/ workshops/ross/2012/) for further instructions and the submission link.

The best papers of the workshop will be considered for inclusion in a special issue of International Journal of High Performance Computing Applications (IJHPCA).

Workshop Chairs

Torsten Hoefler	UIUC
Kamil Iskra	ANL

Program Committee

George Almási	IBM
Henri Bal	VU Amsterdam
Pete Beckman	ANL
Patrick Bridges	UNM
Ron Brightwell	SNL
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Rob Ross	ANL
Jesper L. Träff	Vienna Univ.
Robert Wisniewski	IBM

Contact us

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