Call for Papers
Workshop on Emerging Supercomputing Technologies
In Conjunction with the 25th International Conference on Supercomputing 2011

Future exascale architectures and systems must leverage emerging technologies. No combination of existing technologies provides exascale capability within the footprint of today’s high-performance systems. As system architects evaluate technology alternatives from device and circuit research, they must draw on specific application demands. If a technology is not to be perpetually emerging, compelling applications and system deployments must be found. This workshop promotes the exchange of ideas at the interfaces of supercomputing applications, high-performance architectures, and emerging technologies. New memory technologies are of particular interest.

Topics of Interest:
- Novel deployments of existing technology (e.g., Flash)
- Applications of emerging non-volatile memory (e.g., phase change memory).
- Applications of emerging memory architectures (e.g., eDRAM, 3D-stacking)
- High-performance application requirements for memory and storage
- Technology surveys and tutorials
- Scientific computing and supercomputer design and organization
- Commercial computing and datacenter design and organization
- Coordinated hardware-software design
- Performance analysis, modeling, auto-tuning, optimization
- Energy efficiency analysis, modeling, auto-tuning, optimization

Submission Guidelines:
Submissions must be 6 pages maximum, following ACM conference formatting guidelines. All submissions in PDF format. A collection of the best papers may be invited to a special issue of a journal to be determined.

Full papers: April 15
Reviews Due: May 2
Notification: May 6
Workshop: May 31

Organizers:
Benjamin C. Lee (Duke University), Magnus Själander (Chalmers University of Technology)

Program Committee:
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