

Call For Papers  
**Workshop on Managed Many-Core Systems (MMCS'08)**  
**co-located with HPDC'08**

June 24th, 2008 - Boston, Massachusetts

[www.cercs.gatech.edu/mmcs08](http://www.cercs.gatech.edu/mmcs08)

Multi-core architectures (e.g. quad-cores) are now mainstream and many research projects are exploring a future where multi-cores have evolved into many-cores architectures with hundreds to thousands of cores. This future requires a thorough rethinking of programming models and their supporting software stack to allow applications to make effective use of the computational power of these architectures.

This workshop will address challenges in managed homogeneous and heterogeneous many-core systems. Current approaches to resource management and virtualization are based on small-scale SMP architectures, and they fall short in terms of high-end scalability and support for heterogeneity and fine-grain parallelism. We aim at assessing new needs and their corresponding approaches, abstractions, and mechanisms for resource management issues such as scheduling, synchronization, caching, power management, and system monitoring.

We welcome both technical papers, describing ongoing research and preliminary insights, and position papers introducing and arguing for novel views.

Topics of interest include:

- \* hypervisor structuring for many-core platforms
- \* power management for many-core systems
- \* support for heterogeneous cores
- \* resource management in large scale systems
- \* deployment of specialized cores as accelerators
- \* specialized execution domains (e.g., I/O)
- \* operating system abstractions for many-core platforms
- \* driver applications and benchmarks

Relevant Dates:

Position Papers due: March 31st, 2008

Notification to Authors: April 21st, 2008

Final program available at website: April 23rd, 2008

Submission guidelines

Submissions should adhere to the ACM format

(<http://www.acm.org/sigs/publications/proceedings-templates>)

and submitted through

<https://ssl.linklings.net/conferences/hpdc/>

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