The International Symposium on High Performance Distributed Computing (HPDC) is the premiere venue for presenting the latest research on the design, implementation, evaluation, and use of parallel and distributed systems for high performance and high end computing. The 19th installment of HPDC will take place in the heart of the Chicago, Illinois, the third largest city in the United States, and a major technological and cultural capital that is currently vying to become the 2016 Olympic City. The conference will be held on June 23-25 (Wednesday through Friday) with affiliated workshops occurring on June 21-22 (Monday and Tuesday).

Submissions are welcomed on all forms of high performance distributed computing, including grids, clouds, clusters, service-oriented computing, utility computing, peer-to-peer systems, and global computing ensembles. New scholarly research showing empirical and reproducible results in architectures, systems, and networks is strongly encouraged, as are experience reports of applications and deployments that can provide insights for future high performance distributed computing research.

All papers will be rigorously reviewed by a distinguished program committee, with a strong focus on the combination of rigorous scientific results and likely high impact within high performance distributed computing. Research papers must clearly demonstrate research contributions and novelty while experience reports must clearly describe lessons learned and demonstrate impact. Topics of interest include (but are not limited to) the following, in the context of high performance distributed computing and high end computing:

- Systems
- Architectures
- Algorithms
- Networking
- Programming languages and environments
- Data management
- I/O and file systems
- Virtualization
- Resource management, scheduling, and load-balancing
- Performance modeling, simulation, and prediction
- Fault tolerance, reliability and availability
- Security, configuration, policy, and management issues
- Multicore issues and opportunities
- Models and use cases for utility, grid, and cloud computing

Both full papers and short papers (for poster presentation and/or demonstrations) may be submitted.

IMPORTANT DATES

- Workshop proposals: October 19, 2009
- Paper abstract submissions: January 15, 2010
- Paper submissions: January 22, 2010
- Author notification: March 30, 2010
- Final manuscripts: April 23, 2010

PAPER SUBMISSIONS

Authors are invited to submit full papers of at most 12 pages or short papers of at most 4 pages. The page limits include all figures and references. Papers should be formatted in the ACM proceedings style (e.g., http://www.acm.org/sigs/publications/proceedings-templates). Reviewing is single-blind. Papers must be self-contained and provide the technical substance required for the program committee to evaluate the paper’s contribution, including novelty. Original work that has not appeared in and is not under consideration for another conference or a journal will be held on June 23-25 (Wednesday through Friday) with affiliated workshops occurring on June 21-22 (Monday and Tuesday). There will be NO DEADLINE EXTENSIONS.

PUBLICATION

Accepted full and short papers will appear in the conference proceedings.