Call for Papers
23rd International Workshop on Languages and Compilers for Parallel Computing (LCPC 2010)

October 7 - 9, 2010
Rice University
Houston, Texas, USA
http://lcpc10.rice.edu

The LCPC workshop is a forum for sharing cutting-edge research on all aspects of parallel languages, compilers and related topics including runtime systems and tools. The scope of the workshop spans foundational results and practical experience, and all classes of parallel processors including concurrent, multithreaded, multicore, accelerated, multiprocessor, and tightly-clustered systems. Given the rise of multicore processors, LCPC is particularly interested in work that seeks to transition parallel programming into the computing mainstream.

Specific topics of interest include (but are not limited to):

- Parallel programming models
- Parallel programming languages
- Compiling for parallelism
- Automatic parallelization
- Optimization of parallel programs
- Formal analysis and verification of parallel programs
- Parallel runtime systems
- Task-parallel libraries
- Parallel application frameworks
- Performance analysis tools
- Debugging tools for parallel programs
- Parallel algorithms
- Parallel applications
- Concurrent data structures
- Synchronization and concurrency control
- Software engineering for parallel programs
- Fault tolerance for parallel systems
- Adaptive compilation and optimization of parallel programs
- Software techniques for accelerators (including GPGPUs)

Papers should report on original research, and should include enough background material to make them accessible to the entire LCPC research community. Papers describing experiences should indicate how they illustrate general principles; papers about parallel programming foundations should indicate how they relate to practice.

All submissions must be made electronically through the submission link in the web site. Abstracts must include contact information, the full list of authors and their affiliations, and a summary description (100-300 words) of the anticipated content of the paper. LCPC 2010 papers are limited to 15 pages in the Springer LNCS format. Papers must be submitted in PDF format and must be viewable by Adobe Acrobat Reader. The proceedings will be published by Springer. Authors of accepted papers and posters will be required to sign the Springer copyright form. Instructions for preparing papers for the proceedings will be emailed to authors of accepted papers.