



## **PGAS-X 2011 [[www.pgas-x.org](http://www.pgas-x.org)] Call For Papers**

### ***PGAS-X: PGAS & Shared Memory Extensions for Heterogeneous Architectures***

#### **Call for Papers:**

Partitioned Global Address Space [PGAS] and shared memory programming models such as UPC, Co-Array Fortran, OpenSHMEM and OpenMP offer mechanisms to expose applications to globally shared memory and native thread/task parallelism. However, with the advent of heterogeneous computing architectures, there exists a significant gap in coupling PGAS-style languages to non-traditional computing devices such as GPU's and reconfigurable processors. This workshop shall serve as a forum to present research developments and language-extensions for tightly coupled PGAS/shared memory languages and heterogeneous architectures. Papers, language-extension proposals and demos are solicited in, but not limited to, the following areas:

- Heterogeneous Memory: Memory locality in heterogeneous PGAS applications; memory performance considerations; data movement activities in heterogeneous memory systems
- Language Extensions: Language extensions to directly address thread/task-level memory locality; Tiered PGAS resource utilization; portable heterogeneous PGAS applications
- Compilers and Runtime Systems: Hybrid PGAS compilers; mixed-architecture object payloads; scalable, heterogeneous runtime systems for PGAS
- Debugging/Performance Tools and Techniques: Debugging PGAS-enabled, heterogeneous architectures; numerical accuracy in heterogeneous PGAS

#### **Important Dates:**

Abstracts Due: July 8, 2011

Papers Due: July 29, 2011

Author Notification: August 29, 2011

Camera Ready: September 23, 2011

**Submission Guidelines:** see [www.pgas-x.org/cfp](http://www.pgas-x.org/cfp)