

## Advanced Parallel Processing Technology

**Aug. 24 - 25, 2009**

**Rapperswil, about 50 kilometers from Zurich, Switzerland**



**APPT** is a biennial conference on parallel and distributed processing. Its scope covers all aspects of parallel and distributed computing technologies, including architectures, software systems and tools, algorithms, and applications.

**APPT** originated from collaborations by researchers from China and Germany and has evolved to be an international conference. The past seven conferences were held in Beijing, Koblenz, Changsha, Illmenau, Xiamen, Hongkong, and Guangzhou, respectively. APPT'09 will be the eighth in the series.

Following the success of the last seven conferences, APPT'09 provides a forum for scientists and engineers in academia and industry to exchange and discuss their experiences, new ideas, and results about research in the areas related to parallel and distributed processing.

Although the original objective of APPT is to share the experience in the area of the parallel processing technology with the underlying theories and applications, more and more work will be focused on state-of-the-art research and projects due to the tremendous advances in multi-core architecture, wireless networks, mobile computing, sensor networks, distributed computing, and novel computing model and technologies.

### ***Feature Topics***

Contributions are solicited in all areas and topics pertaining to pervasive computing research and applications. These include, but are not limited to, the following topics:

- **Parallel architectures and systems**  
Architectures for chip-level parallelism; Special-purpose architectures and accelerators; Architecture of the memory hierarchy; Network and interconnect architectures; Parallel I/O and storage systems; Power-efficient architectures; Dependable architectures; Green-IT; Embedded computing
- **Parallel software**  
Parallel programming languages and compilers; Runtime systems, operating systems, and virtualization; Resource management; Fault tolerance; Scalability and programming environments and tools

- **Parallel algorithms and applications**  
Massively parallel applications; Fault-tolerance of algorithms; Optimizations of communication and synchronization protocols; Network algorithms, Scheduling and load balancing; Scientific applications; Applications using multicore and/or GPUs
- **Distributed computing**  
Peer-to-peer computing; Grid computing; Pervasive and mobile computing architectures; Security in networks and distributed systems

### ***Important Dates***

Paper submission	13. April 2009
Acceptance notification	13. May 2009
Camera-ready due	07. June 2009

### ***Submission Guidelines***

Submitted papers must be unpublished and not currently under consideration elsewhere for publication. Only electronic submissions (PS or PDF) will be considered. Page limit is at most 15 pages (single column, 11pt fonts and 1.5 line spaced, excluding references, figures and tables). All submitted papers will undergo a rigorous review process managed by the technical program committee.

**Important:** Manuscripts must be accompanied by a signed Springer copyright form (refer to website: <http://appt09.com/call.html>)

### ***Organization***

General co-Chairs:	Prof. Hermann Mettler, HSR, Switzerland Prof. Xingming Zhou, Chinese Academy of Sciences, China
Program co-Chairs:	Prof. Yong Dou, NUDT, China Prof. Ralf Gruber, EPFL, Switzerland Prof. Josef Joller, HSR, Switzerland
Organization Chair:	Ms. Tina Sasse, Abriocot GmbH, Switzerland

### ***Sponsored by***

- Computer Architecture Professional Committee of China Computer Federation
- HSR Hochschule für Technik Rapperswil, Switzerland
- National Laboratory for Parallel and Distributed Processing, China

### ***Invited Keynotes***

- Prof. Kunle Olukotun, Department of EE&CS, Stanford University, USA,  
<http://ogun.stanford.edu/~kunle/>
- Prof. Al Geist, Computer Science Research Group, Oak Ridge, USA  
<http://www.csm.ornl.gov/~geist/>
- e.a.