Welcome Message

We would like to welcome you to the third International workshop on Parallel Programming Models and System Software for High-End Computing (P2S2). The third edition of P2S2 builds on the successes of the previous meetings in this series and seeks to contribute to this diverse and dynamic field of high-end computing (HEC). It is our pleasure to welcome you to this meeting. We hope that you can take advantage of the technical paper presentations and other open discussions associated with the workshop this year.

In the past decade, HEC architectures have become an important tool in all aspects of scientific discovery. Recently, multi- and many-core systems (Intel, AMD), alternative architectures and accelerators (GPGPUs, Cell), high-speed network architectures (InfiniBand, Myrinet, iWARP), and integrated computing platforms (Blue Gene, Cray) have been introduced along this effort. These advances in the fundamental architecture of HEC architectures mean little, however, without appropriate software components that enable high-performance applications to take advantage of these architectures. System software plays a crucial role in exposing the raw performance of the underlying hardware in an efficient manner. Equally important are innovative, high-performance Parallel Programming models that enable scientists to express parallel algorithms so that they can execute efficiently on HEC architectures. The goal of the P2S2 workshop is to bring together researchers and practitioners in parallel programming models and systems software for high-end computing architectures. This year's program committee has chosen an eclectic blend of technical papers from the HEC community. The program consists of ten technical papers and a panel discussing the advances and challenges in hybrid heterogeneous computing.

We want to acknowledge the people who have contributed their indispensable help in organizing and supporting this event, including the wonderful technical program committee who helped select the best submitted papers to be presented at the workshop, and the authors who submitted their excellent work. It has been our pleasure to organize this workshop, and we are grateful for your attendance and for making P2S2 2010 a high-quality program. We believe that this workshop will be an exciting and unique event of ICPP 2010. Welcome to San Diego, CA, and enjoy the presentations at the P2S2 2010!

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