Sino-German Workshop on
Cloud-based High Performance Computing

September 26-October 1, 2011, Shanghai, China

上海大学
Shanghai University

HPI Hasso
Plattner
Institut
IT Systems Engineering | Universität Potsdam

The workshop consists of an opening ceremony, 10 sessions, a mini-Workshop for PhD students and several social events.

We will have 30 high-quality scientific talks from both German and Chinese invited speakers. Each talk will be 30 minutes (including both presentation and Q&A).

September 26, 2011 (Monday)	September 27, 2011 (Tuesday)

Arrival and Registration

September 27, 2011 (Tuesday)

09:00-10:30 Opening Ceremony and Session 1 (2 Talks)
Moderator: Prof. Wu ZHANG, PhD
Welcome Speech
Prof. Song WU, PhD
Vice President, Shanghai Univerity,
Shanghai, China

Greeting Speech
Director, Sino-German Centor for Science
Foundation, Beijing, China

Greeting Speech
Prof. Guoqing FU
Director, International Office, Science and
Technology Commission of Shanghai Municipal
Government, Shanghai, China

Welcome Speech
Prof. Wu ZHANG, PhD
"Introduction to SHU and the Workshop C-HPC"

Opening Speech
Prof. Dr. Christoph MEINEL
President&CEO, Hasso Plattner Institute
Potsdam, Germany
"Trusted Cloud Computing - Visions and
Challenges"

Opening Speech
Prof. Wu ZHANG, PhD,
Executive Dean, School of Computer Science and
Engineering, Shanghai University
Shanghai, China
"Lattice Boltzmann Method for Aircraft
Aerodynamics"

10:45-11:30 Coffee Break (Group Photo)

11:30-12:30 Session 2: 2 Talks
Chair: Prof. Dr. Christoph MEINEL

Prof. Dr.-Ing. Dr. h.c. Dr. h.c. Michael RESCH,
University of Stuttgart/HLRS, Germany
"Know-How Transfer in Supercomputing - How
Industry and Research can Cooperate"

Dr. Genguo LI,
Shanghai Supercomputing Center, China
"Some HPC Applications in Shanghai
Supercomputer Center"

12:30-14:00 Lunch Break

13:30-15:00 Session 3: 3 Talks
Chair: Prof. Dr. Andreas POLZE
Prof. Dr. Joerg NOLTE
BTU Cottbus, Germany
"From Multicore to Manycore Architectures:
Current Trends and Operating System Issues"

Assoc. Prof. Junjie PENG, PhD
Shanghai University, China
"A Leasing Instance based Billing Model for
Cloud Computing"

Prof. Dr. Frank BELLOSA
Karlsruher Institut for Technology (KIT), Germany
"The Impact of the Operating System on Power
and Performance"

15:00-15:30 Coffee Break

15:30-17:00 Session 4: 3 Talks
Chair: Prof. Yi JIN, PhD
Prof. Dr. Andreas POLZE
Hasso Plattner Institute, Germany
"Towards Predictable Cloud Computing"

Assoc. Prof. Quan QIAN, PhD
Shanghai University, China
"A Case of Distributed Data Secure Storage and
Retrieval in Cloud Computing"

Dr. Feng CHENG
Hasso Plattner Institute, Potsdam, Germany
"Security Analytics using HPC Techniques"

18:00-20:00 Reception

September 28, 2011 (Wednesday)

09:00-10:30 Session 5: 3 Talks
Chair: Prof. Huiqun YU, PhD

Prof. Dr. Robert HIRSCHFELD,
Hasso Plattner Institute, Potsdam, Germany
"The Lively Cloud -- A Programming and
Deployment Environment for End-user
Applications in the Web

Prof. Yi JIN, PhD
Shanghai University, China
"Using Ternary Optical Computer with MPI
Program"

Dr. Matthias KORCH
University of Bayreuth, Germany
"Scalability and Adaptivity by Task-based
Approaches in High-Performance Computing"

10:30-11:00 Coffee Break

11:00-12:00 Session 6: 2 Talks
Chair: Prof. Dr. Robert HIRSCHFELD

Prof. Huiqun YU, PhD
East China University of Science and Technology,
Shanghai, China
"A Regression Testing Method
for Service Composition"

Dr. Peter TROEGER
Hasso Plattner Institute, Potsdam, Germany
"The Missing Link - Dependability and Cloud
Standardization"

12:00-13:30 Lunch Break

13:30-15:00 Session 7: 3 Talks
Chair: Prof. Hai JIN, PhD

Prof. Dr. Felix WOLF
RWTH Aachen/JSC, Aachen, Germany
"The Role of Performance Engineering in HPC
Application Development"

Prof. Binyu ZANG, PhD
Fudan University, Shanghai, China
"Resource Mangement in Cloud Environnent"

Dr. Alexander ZEIER/Jan SCHAFFNER, Msc.
Hasso Plattner Institute, Potsdam, Germany
"In-Memory Databases for Enterprise
Applications in High-Performance Cloud
Environments"

15:00-15:30 Coffee Break

September 29, 2011 (Thursday)

15:30-17:00 Session 8: 3 Talks
Chair: Prof. Dr. Felix WOLF

Prof. Hai JIN, PhD
Huazhong University of Science and Technology,
Wuhan, China
"How to Provide Public with Pervasive HPC
Service?"

Prof. Peng LIU, PhD
PLA University of Science and Technology,
Nanjing, China
"The Development and Opportunity of Cloud
Computing in China"

Prof. Jianhui JIANG, PhD
Tongji University, Shanghai, China
"Dependability in Cloud Computing"

17:30-22:00
Cruise on Huangpu River &
Conference Gala Dinner

09:00-10:30 Session 9: 3 Talks
Chair: Prof. Guihai CHEN, PhD

Prof. Dr. Dieter KRANZLMUELLER, Ludwig-
Maximilians-University Munich/LRZ, Munich,
Germany
 "Grids, Clouds, and e-Infrastructures: New
Challenges for IT Management"

Prof. Yunquan ZHANG, PhD, Institute of Software,
Chinese Academy ofScience, Beijing, China
"HPC vs. Cloud Computing:Synergy or
Competition?"

Prof. Dr. Dr.-Ing. habil. Arndt BODE
/ Prof. Dr. Dieter KRANZLMUELLER
Technical University Munich/LRZ, Germany
"High Performance Computing with SuperMUC
as a Contribution for PRACE"

10:30-11:00   Coffee Break

Prof. Guihai CHEN, PhD
Nanjing University, China
"Data Center Networks"

Prof. Baogang WEI, PhD
Zhejiang University, China
"Digital Library in Cloud Computing"

Prof. Minyi GUO, PhD
Shanghai Jiaotong University, China
"Energy-Aware Compiler Techniques for Multi/
Many-Core Architectures"

12:30-13:30 Lunch

13:30-15:30 Mini-Workshop for PhD Students
Chair: Prof. Zhang WU, PhD

Diplom.-Inf. Maxim SCHNJAKIN, HPI
"A Security and High-Availability Layer for Cloud
Storage "

Jiandun LI, MSc., SHU
"Energy-Efficient Scheduling of Virtual Resources
in Private Cloud "

Ibrahim TAKOUNA, MSc., HPI
"Power-aware Dynamic Configuration of Host
and Virtual Machines for Virtualized HPC
Environments"

Zhixiang LIU, MSc., SHU
"MPI and OpenMP Paradigms and its Application
of Solving Large Scale Sparse Linear Systems"

Wesam DAWOUD, MSc., HPI
"Elastic VM: A Fine-grained Scalability
Architecture for Virtualized Environments"

Kai SONG, MSc., SHU
"The Monitor System of Ternary Optical
Computer--Overall Structure and the
Collaborative Interface with High-Performance
Computing Cluster "

15:30-16:00 Coffee Break

16:00-18:00 Industrial Presentations, Group
Discussion, and Closing Remarks

18:00-20:00 Dinner

September 30, 2011 (Friday)

Social Event

October 1, 2011 (Friday)

Departure