



Tuesday, June 24, 2014

■ IDC Breakfast Briefing

June 24, 2014, 07:00 am - 08:30 am

07:30 am - 11:00 am Welcome Coffee

Hall 4, CCL

■ HPC Futures IBM & Lenovo

June 24, 2014, 08:00 am - 08:45 am

Hall 1, CCL

■ Research Papers 02 Applications

June 24, 2014, 08:30 am - 10:30 am

10:30 am - 11:30 am Coffee Break

Hall 3, CCL

CoreTSAR: Adaptive Worksharing for Heterogeneous Systems

08:30 am - 09:00 am

SNAP: Strong Scaling High Fidelity Molecular Dynamics Simulations on Leadership-Class Computing Platforms

09:00 am - 09:30 am

History-Based Predictive Instruction Window Weighting for SMT Processors

09:30 am - 10:00 am

On the Performance Portability of Structured Grid Codes on Many-Core Computer Architectures

10:00 am - 10:30 am

■ Future Supercomputing Directions

June 24, 2014, 09:00 am - 10:30 am

10:30 am - 11:30 am Coffee Break

Hall 1, CCL

One Size Fits All vs. System-on-Chip Integration for HPC

09:00 am - 09:30 am

A Vision for Data Centric Systems

09:30 am - 10:00 am

Advancing HPC Software from Today through Exascale & Beyond

10:00 am - 10:30 am

■ Evolution of Advanced Clustering

June 24, 2014, 09:00 am - 10:30 am

10:30 am - 11:30 am Coffee Break

Hall 2, CCL

■ BoF 05

June 24, 2014, 09:00 am - 10:00 am

Hall 4, CCL



BoF 06

June 24, 2014, 09:00 am - 10:00 am
Hall 5, CCL

Research Posters & HPC in Asia Posters

June 24, 2014, 09:00 am - 06:00 pm
07:30 am - 11:00 am Welcome Coffee
10:30 am - 11:30 am Coffee Break
01:00 pm - 02:15 pm Lunch
04:15 pm - 05:15 pm Coffee Break
Multi-Purpose Area 3/4 Foyer, CCL

BoF 07

June 24, 2014, 10:00 am - 11:00 am
07:30 am - 11:00 am Welcome Coffee
10:30 am - 11:30 am Coffee Break
Hall 4, CCL

BoF 08

June 24, 2014, 10:00 am - 11:00 am
07:30 am - 11:00 am Welcome Coffee
10:30 am - 11:30 am Coffee Break
Hall 5, CCL

Exhibition

June 24, 2014, 10:00 am - 06:00 pm
07:30 am - 11:00 am Welcome Coffee
10:30 am - 11:30 am Coffee Break
01:00 pm - 02:15 pm Lunch
04:15 pm - 05:15 pm Coffee Break
Exhibition Hall, Hall 2



Exhibitor Forum 01

June 24, 2014, 10:20 am - 01:40 pm

07:30 am - 11:00 am Welcome Coffee

10:30 am - 11:30 am Coffee Break

01:00 pm - 02:15 pm Lunch

Exhibition Hall #660, Hall 2

transtec: Implementing IaaS for HPC

10:20 am - 10:40 am

IBM: To Burst or Not to Burst That Is the Question

10:40 am - 11:00 am

UNIVA: Do More & Save More by Paying for Software

11:00 am - 11:20 am

Cycle Computing: Life Sciences, Manufacturing & Financial Services Case Studies: Implementing Cloud for Better Science, Better Design & Better Business

11:20 am - 11:40 am

GiDEL: Green & Scalable High Performance Computing Architecture

11:40 am - 12:00 pm

Hewlett-Packard: Trends in Advanced HPC Architectures

12:00 pm - 12:20 pm

Bull: Enhancing HPC Productivity

12:20 pm - 12:40 pm

Supermicro: Supermicro's UltraTwin Technology Advancements & Architecture

12:40 pm - 01:00 pm

Megware: Technical Update & Current HPC Activities: SlideSX

01:00 pm - 01:20 pm

Barco: Story of a Pixel

01:20 pm - 01:40 pm

BoF 09

June 24, 2014, 11:00 am - 12:00 pm

07:30 am - 11:00 am Welcome Coffee

10:30 am - 11:30 am Coffee Break

Hall 4, CCL

BoF 10

June 24, 2014, 11:00 am - 12:00 pm

07:30 am - 11:00 am Welcome Coffee

10:30 am - 11:30 am Coffee Break

Hall 5, CCL



■ **HPC in Life Sciences**

June 24, 2014, 11:30 am - 01:00 pm

10:30 am - 11:30 am Coffee Break

01:00 pm - 02:15 pm Lunch

Hall 1, CCL

High-Performance, High-Capacity or High-Throughput Computing? The Challenges of Genomic Big Data

11:30 am - 12:00 pm

HPC-Supported Therapy Development in Oncology

12:00 pm - 12:30 pm

Multiscale Systems Biology: Big Data Challenges in Supercomputing Enabling Translational Medicine in Cardiology

12:30 pm - 01:00 pm

■ **CAE Solutions for HPC Clusters**

June 24, 2014, 11:30 am - 01:00 pm

10:30 am - 11:30 am Coffee Break

01:00 pm - 02:15 pm Lunch

Hall 2, CCL

CADFEM IT Service & Engineering Cloud

11:30 am - 11:45 am

Large Scale Computations with MATLAB

11:45 am - 12:00 pm

HPC for Realistic Simulation

12:00 pm - 12:15 pm

Enabling Technologies in STAR-CCM+ for Running on Cloud Architecture

12:15 pm - 12:30 pm

High Performance Multi-Physics Computations Including Fluid Dynamics & Aeroacoustics

12:30 pm - 12:45 pm

Business Benefits of HPC in Scalable High End Visualization Environments

12:45 pm - 01:00 pm



■ Research Papers 03 Architectures

June 24, 2014, 11:30 am - 01:00 pm

10:30 am - 11:30 am Coffee Break

01:00 pm - 02:15 pm Lunch

Hall 3, CCL

The Brand-New Vector Supercomputer, SX-ACE

11:30 am - 12:00 pm

Impact of Future Trends on Exascale Cloud Computing

12:00 pm - 12:30 pm

Performance Characterization of RSC PetaStream Module

12:30 pm - 12:45 pm

Deploying Darter A Cray XC30 System

12:45 pm - 01:00 pm

■ BoF 11

June 24, 2014, 12:00 pm - 01:00 pm

01:00 pm - 02:15 pm Lunch

Hall 4, CCL

■ BoF 12

June 24, 2014, 12:00 pm - 01:00 pm

01:00 pm - 02:15 pm Lunch

Hall 5, CCL



Exhibitor Forum 02

June 24, 2014, 02:00 pm - 06:00 pm

01:00 pm - 02:15 pm Lunch

04:15 pm - 05:15 pm Coffee Break

Exhibition Hall #660, Hall 2

Sugon: Innovative Technologies in Supercomputing & Big Data

02:00 pm - 02:20 pm

NVIDIA: Faster Design Cycles with High Performance Hardware in the Cloud

02:20 pm - 02:40 pm

AMD: Building Power Efficient Compute Clusters with AMD FirePro S-Series Graphics

02:40 pm - 03:00 pm

Intel: Driving Innovation in the Parallel Universe

03:00 pm - 03:20 pm

Samsung: PCIe, VNAND, DDR4 Samsung Introduces Game Changing Developments in the Memory/Storage Subsystem

03:20 pm - 03:40 pm

Asetek: Practical Liquid Cooling for HPC & High-Utilization Data Centers

03:40 pm - 04:00 pm

CoolIT Systems: Direct Contact Liquid Cooling The Key to Optimizing Data Center Cooling

04:00 pm - 04:20 pm

Dell: Empowering Efficient HPC with Dell

04:20 pm - 04:40 pm

Fujitsu: Fujitsu PHI Turnkey Solution: From Blueprint to End Users

04:40 pm - 05:00 pm

Cray: Cray XC Delivering Application Performance

05:00 pm - 05:20 pm

Rausch Netzwerktechnik: Seagate Kinetic Open Storage Platform Innovation to Enable Scale-Out Storage

05:20 pm - 05:40 pm

Altair: Catalyze Product Innovation with HPC Clouds

05:40 pm - 06:00 pm

Distinguished Speakers

June 24, 2014, 02:15 pm - 03:15 pm

01:00 pm - 02:15 pm Lunch

Hall 1, CCL

Fault Tolerance in Numerical Library Routines

02:15 pm - 02:45 pm

Air is an Insulator: Adventures in Sustainable Computing

02:45 pm - 03:15 pm



■ Open POWER

June 24, 2014, 02:15 pm - 02:45 pm

01:00 pm - 02:15 pm Lunch

Hall 2, CCL

■ Supercomputing & Human Brain Project

June 24, 2014, 02:15 pm - 04:15 pm

01:00 pm - 02:15 pm Lunch

04:15 pm - 05:15 pm Coffee Break

Hall 3, CCL

HBP Lift Off Status & Update

02:15 pm - 02:40 pm

The Cellular Simulator of the HBP NEURON

02:40 pm - 03:05 pm

The Network Simulator of the HBP NEST

03:05 pm - 03:30 pm

Numerical Neuromorphic Realtime Simulations with SpiNNaker

03:30 pm - 03:55 pm

Questions & Answers

03:55 pm - 04:15 pm

■ Research Papers 04 Performance Analysis

June 24, 2014, 02:15 pm - 04:15 pm

01:00 pm - 02:15 pm Lunch

04:15 pm - 05:15 pm Coffee Break

Hall 4, CCL

Performance Predictions of Multilevel Communication Optimal LU & QR Factorizations on Hierarchical Platforms

02:15 pm - 02:45 pm

Hourglass: A Bandwidth-Driven Performance Model for Sorting Algorithms

02:45 pm - 03:15 pm

Performance Analysis of Graph Algorithms on P7IH

03:15 pm - 03:45 pm

Sparsifying Synchronizations for High-Performance Shared-Memory Sparse Triangular Solver

03:45 pm - 04:15 pm

■ BoF 13

June 24, 2014, 02:15 pm - 03:15 pm

01:00 pm - 02:15 pm Lunch

Hall 5, CCL

■ Linux Clusters

June 24, 2014, 02:45 pm - 03:15 pm

Hall 2, CCL



Extreme Computing Challenges

June 24, 2014, 03:15 pm - 04:15 pm

04:15 pm - 05:15 pm Coffee Break

Hall 1, CCL

Ecosystem of Extreme Computing Challenges

03:15 pm - 03:35 pm

Challenge-Driven Initiatives in Extreme-Scale Computing

03:35 pm - 03:55 pm

Challenges in Climate Simulations at Extreme Scale

03:55 pm - 04:15 pm

EU I4MS Initiative

June 24, 2014, 03:15 pm - 04:15 pm

04:15 pm - 05:15 pm Coffee Break

Hall 2, CCL

HPC Cloud-Based Simulation Services for Industry First Results & Future Opportunities in I4MS

03:15 pm - 03:30 pm

FORTISSIMO Bringing HPC Solutions to SMEs across Europe

03:30 pm - 03:45 pm

CloudFlow Computational Cloud Services & Workflows for Agile Engineering

03:45 pm - 04:00 pm

A Platform for Running Manufacturing/Engineering Simulations on the Cloud First Results of the CloudSME Project

04:00 pm - 04:15 pm

BoF 14

June 24, 2014, 03:15 pm - 04:15 pm

04:15 pm - 05:15 pm Coffee Break

Hall 5, CCL

Tuesday Keynote

June 24, 2014, 05:15 pm - 06:00 pm

04:15 pm - 05:15 pm Coffee Break

Hall 1, CCL

If you Cant Beat Them, Lead Them Convergence of Supercomputing & Next Generation Extreme Big Data



■ HPC Impact on U.S. Industry

June 24, 2014, 05:15 pm - 06:00 pm

04:15 pm - 05:15 pm Coffee Break

Hall 2, CCL

Introduction

05:15 pm - 05:20 pm

Industrial HPC Applications, Scalability & Challenges

05:20 pm - 05:40 pm

HPC & Simulation-Based Engineering in Rolls-Royce

05:40 pm - 06:00 pm

■ Vendor Parties

June 24, 2014, 07:00 pm - 10:00 pm

Various Locations, Others