



HPC User Forum Agenda

37th HPC User Forum -- September 13 to 15, 2010 -- Seattle, Washington
"Using HPC to Drive Economic and Scientific Competitiveness"

Monday, September 13, 2010

- 4:30pm Registration starts
- 6:45pm Special dinner event, with 10 minute vendor updates (Adaptive, AMD, Appro, Bright Computing, HP, Mellanox, Panasas, Platform)

Tuesday, September 14, 2010

- 7:15am Networking Breakfast
- 8:15am Welcome and HPC Market Update, Steve Finn, Sharan Kalwani and Earl Joseph
Morning Session Chair: Paul Buerger, Avetec
- 8:30am Exascale and Near Exascale Plans, Issues and Directions
Moderator: Paul Buerger
 - EU and China Directions, Steve Conway
 - DOE Nuclear Modeling and Simulation Hub (CASL), John Turner, ORNL
 - John Gustafson, Intel Labs
 - EESI, The European Exascale Software Initiative, Andy Jones, NAG
- 10:00am Break
- 10:15am HPC In Aerospace, Moderator: Doug Ball, Boeing
 - Multi-Physics Simulation Software Development for the Defense Acquisition Engineering Workforce, Robert Meakin, HPCMO
 - Use of FUN3D (an unstructured grid flow solver), Eric Nielsen, NASA Langley Research Center
 - Using HPC to Develop UAVs, Clayton Triggs, Swift Engineering
 - Rupak Biswas, NASA Ames Research Center
- 12:00pm Invited Vendor Technology Update: Amazon Web Services
- 12:15pm Networking Lunch
- 1:15pm Application Scalability and High Productivity Computing, Moderators: Paul Muzio and Vince Scarafino
 - Nick Wright, Lawrence Berkeley National Laboratory
 - Paul Muzio, City University of New York
 - Joe Morrison, NASA
 - John Turner, ORNL
 - Piyush Mehrotra, NASA
- 3:00pm Invited Vendor Technology Update: Brocade
- 3:15pm Break
- 3:45pm Updates on Industry Outreach Programs, Merle Giles, NCSA, and Suzy Tichenor, ORNL
- 4:15pm Gordon: NSF Flash-based System for Data-intensive Science, Mahidhar Tatineni, SDSC
- 4:45pm Invited Vendor Technology Update: Intel
- 5:00pm Networking Break and Time for 1-on-1 Meetings
- 6:00pm Buses leave for dinner (a short ride)
- 6:30pm Reception and Special Dinner Event Sponsored by Intel, at the Seattle Aquarium



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Wednesday, September 15, 2010

- 7:15am Networking Breakfast
- 8:10am Welcome, Earl Joseph and Steve Finn
- 8:15am Data Intensive Computing, Moderator: Paul Muzio
- Graph algorithms for irregular, unstructured data, John Feo, PNNL
 - IBM's InfoSphere Streams, Ann Borrett
 - Data-intensive computing at SNL, Andy Wilson
 - graph500 and data intensive HPC, Richard Murphy, Sandia National Laboratory
 - Large-scale knowledge discovery, Steve Reinhardt, Microsoft
 - Advanced business analytics using HPC, Phil Morris, Platform Computing
 - Richard Altmaier, Intel
- 10:30am Invited Vendor Technology Update: Microsoft
- 10:45am Break
- 11:15am IDC New HPC Award Program and EU Research Results
- 11:45am Invited Vendor Technology Update: IBM
- 12:00pm Networking Lunch
- 1:00pm Clearing up Clouds in HPC, Moderator: Sharan Kalwani
Panel Theme: Business and Technical Models in HPC Cloud Computing
- Tom Coull, Penguin Computing
 - Jeff Broughton, Magellan Cloud @ Lawrence Berkeley National Labs
 - Bob Graybill, Nimbis Services Inc.
 - Deepak Singh, Amazon Cloud Services
 - Christian Tanasescu, SGI
 - Josh Simons, VMware
 - Ryan Waite, Microsoft
 - Richard Kaufmann, HP
- 2:45pm Invited Vendor Technology Update: Oracle
- 3:00pm Break
- 3:15pm Technical Directions, Issues and Success Stories with Alternative Processors,
Heterogeneous Multi-Cores and GPGPU Computing in HPC
Moderator: Steve Finn
- Rob Farber, Pacific Northwest National Laboratory
 - Song Park, Army Research Laboratory
 - Nash Palaniswamy, Intel
 - Dave Wallace, Cray
 - Stan Posey, Nvidia
 - Gao Guang, ET International

- HP, Ed Turkel
- Michael Houston, AMD

5:00pm Meeting Wrap-Up, Steve Finn, Sharan Kalwani and Earl Joseph