



# HPC User Forum Agenda

33<sup>rd</sup> HPC User Forum – September 8 to 10, 2009 Broomfield, CO

## Tuesday, September 8, 2009

- 4:00pm Registration opens
- 6:30pm Reception starts
- 7:00pm Dinner and short vendor technology updates: IBM, Appro, Hitachi Cable, Luxtera, Mellanox, ScaleMP and Tech-X

## Wednesday, September 9, 2009

- 7:30am Networking Breakfast
- 8:10am Introductions and Welcome, Steve Finn and Earl Joseph  
Morning Session Chair: Steve Finn
- 8:15am Weather/climate presentation from ORNL, Jim Hack
- 8:45am Weather/climate presentation from NCAR, Henry Tufo
- 9:15am Weather/climate presentation from NASA/Goddard, Phil Webster
- 9:45am Two short vendor technology updates (Altair and Platform)
- 10:15am Break
- 10:30am Weather/climate presentation from NRL Monterey, Jim Doyle
- 11:00am Weather and Climate Directions from an IBM perspective, Jim Edwards
- 11:25am **Panel on HPC Weather/Climate/Earth Sciences Requirements & Directions**  
Moderators: Steve Finn and Earl Joseph  
*This panel will address the common requirements, issues and concerns in the weather forecasting and climate modeling HPC application area.*
- 12:00pm Networking Lunch  
Afternoon Session Chair: Paul Muzio
- 1:00pm HPC in Europe, HECToR Update, Andrew Jones, NAG
- 1:30pm DOD HPCMP Program Update, Larry Davis
- 2:00pm Weather/climate Research at Northrop Grumman, Glenn Higgins
- 2:25pm Weather and Climate Directions from a Cray perspective, Per Nyberg
- 2:50pm **Panel on Government and Political Issues, Concerns and Ideas for New Directions**  
Moderator: Charlie Hayes  
Panel members:
  - Phil Webster, NASA Goddard
  - JR Kirkland , Principal FBA, Inc.
  - Vijay Agarwala, Pennsylvania State University
  - Debra Goldfarb, Microsoft
  - Stephen Wheat, Intel
  - Bob Graybill, Nimbus
  - Rene Copeland, SGI
  - Mark Guiton, Cray
- 3:30pm DICE Parallel File System Project, Tracey Wilson

4:00pm NCAR HPC User Site Tour, return by 6:00pm  
6:00pm Networking break and time for 1-on-1 meetings  
6:30pm Special Dinner Event



## Thursday, September 10, 2009

- 7:30am Networking Breakfast
- 8:10am Welcome, Earl Joseph and Steve Finn  
Morning Session Chair: Douglas Kothe
- 8:15am Power Grid Research at PNNL, Mo Khaleel
- 8:45am HPC Data Center Power and Cooling Issues, and New Ways to Measure HPC Systems, Roger Panton, Avetec
- 9:15am Compiler and Tools: User Requirements from ARSC, Edward Kornkven
- 9:45am New HPC Directions at Microsoft, Roger Barga
- 10:15am Break
- 10:30am **Technical Panel on HPC Front-End Compiler Requirements and Directions**  
Moderators: Robert Singleterry, Vince Scarafino  
Panel members:
- Convey Computer, Rowan, Steve
  - Intel, Geva, Robert
  - Mitrionics, Mohl, Stefan
  - RapidMind, McCool, Michael
  - NAG, Robert Meyer
  - SGI, Feind, Karl
  - Microsoft, Steve Teixeira
  - PGI, Brent Lebeck
- 12:15pm Networking Lunch  
Afternoon Session Chair: Jack Collins
- 1:00pm ARL HPC User Site Update, Thomas Kendall
- 1:30pm Weather/climate presentation from NCAR, John Michelakes
- 2:00pm **Technical Panel on HPC Application Scaling Issues, Requirements and Trends -- Scalability: What works, what doesn't**  
Moderators: Doug Kothe and Paul Muzio.  
Panel members:
- Jonathan Carter, LBNL
  - Bronis De Supinski, LLNL
  - Mike Heroux, Sandia
  - Phil Jones, LANL
  - Nir Paikowsky, ScaleMP
  - Piyush Mehrotra, NASA Ames
  - John Mickalakes, NCAR
  - Galen Shipman, ORNL
  - Trey White, ORNL
- 3:15pm One short vendor technology update (Microsoft)
- 3:30pm Break
- 4:00pm Weather/climate presentation from NASA Langley, Mike Little
- 4:30pm "Spider" the Largest Lustre File Stem, ORNL, Galen Shipman
- 5:00pm Meeting Wrap-Up and Future Meeting Dates, Earl Joseph and Steve Finn
- 5:00pm Meeting Ends

**October 2009 International HPC User Forum Meetings:**

- HLRS/University of Stuttgart, October 5-6, 2009 (midday to midday)
- EPFL, Lausanne, Switzerland, October 8-9, 2009 (midday to midday)