

2013 DOE Computer Graphics Forum

Site Chair: Hank Childs, University of Oregon and LBNL

Program Chair: Mark Hereld, ANL

Location: Portland, OR

Dates: April 22-25, 2013

Monday April 22, 2013

Evening Check-in: 6:00 pm - 7:30 pm, Fireplace Lobby

Tuesday April 23, 2013

Breakfast: 8am-9am, London Grill

Welcome: 9am (Childs & Hereld)

Site Reports Session: 9:00 am - 12:00 pm

- 9:00 - 9:15 ANL (Mark Hereld)
- 9:15 - 9:30 INL (Eric Whiting)
- 9:30 - 9:45 LANL (Laura Monroe)
- 9:45 - 10:00 LBNL (Harinarayan Krishnan)
- 10:00 - 10:15 LLNL (Brad Whitlock)
- 10:15 - 10:30 NREL (Kenny Gruchalla)
- 10:30 - 10:45 ORNL (Dave Pugmire)
- 10:45 - 11:00 SNL (Alan Scott)
- 11:00 - 11:15 UCAR (John Clyne)
- 11:15 - 11:30 IDAV (Ken Joy)
- 11:30 - 11:45 UOregon (Hank Childs)
- 11:45 - 12:00 EVL (Maxine Brown)

Open Discussion

Walking Lunch (Portland Roach Coach Expedition): 12:00 pm - 2:00 pm

Software Update Session: 2:00 pm - 3:00 pm

- 2:00 - 2:15 VisIt (Brad Whitlock)
- 2:15 - 2:30 ParaView (Ken Moreland)
- 2:30 - 2:45 EAVL (Jeremy Meredith)
- 2:45 - 3:00 VAPOR (John Clyne)
- 3:00 - 3:15 SAGE (Maxine Brown)

Open Discussion

Coffee Break: 3:15 - 3:45

Software Update Session: 3:45 pm – 4:40 pm

- 3:45 - 4:00 ParVIS (Wei Huang)
- 4:00 - 4:15 SDAV (John Patchett)
- 4:15 - 4:40 UV-CDAT (John Patchett)
- 4:40 - 5:05 Brad Carvey – Creating Scientific Animations

Open Discussion

Wednesday April 24, 2013

Breakfast: 8am-9am, London Grill

Research Session: 9:00am-12:00pm

- 9:00 - 9:25 Dave Pugmire -- "The New Everest"
- 9:25 - 9:50 Maxine Brown -- CAVE2
- 9:50 - 10:15 Ken Moreland -- Dax
- 10:15 - 10:40 Nathan Fabian - insitu and intransit at Sandia
- 10:40 - 11:05 John Patchett -- "Case Study of In Situ Analysis in ASC Integrated Codes"
- 11:05 - 11:30 Eugene Zhang -- "Flow visualization using tensor-based analysis"

Open Discussion

Working Lunch (Open Discussions): 12:00-1:30, London Grill

Panel: 1:30 pm - 2:45 am, Moderator: Somebody V. Special (Sean Ahern, organizer)

- Big Data: Is it All Hype?
 - Allen Sanderson, John Clyne, Tom Peterka, Ken Moreland, Laura Monroe

Coffee Break: 2:45 - 3:15

Research Session: 3:15 pm - 4:55 pm

- 3:15 - 3:40 Tom Peterka -- "Benchmarking Performance of Data Analysis Communication Algorithms"
- 3:40 - 4:05 David Camp -- "Optimizing VisIt for Multi-Core Systems"
- 4:05 - 4:30 Harinarayan Krishnan -- "Client & Server Side Scripting Support within VisIt"
- 4:30 - 4:55 Mark Hereld -- "Proactive Support for Large-Scale Data Exploration"

Open Discussion

Thursday April 25, 2013

Breakfast: 7:30 am- 8:30 am, London Grill

Panel: 8:30 pm - 9:45 pm, Moderator: Eric Whiting

- From glass to GPU
 - Laura Monroe, Kenny Gruchella, Dave Pugmire

Research Session: 9:45 am - 10:35 am

- 9:45 - 10:10 Cyrus Harrison -- "Dynamic Derived Field Generation on Many-Core Architectures using OpenCL and Python"
- 10:10 - 10:35 Hank Childs -- "GPU Acceleration of Particle Advection Workloads in a Parallel, Distributed Memory Setting"

Open Discussion

Closing Remarks

Adjourn