NVIDIA GPU Computing Theater

Open to all attendees of SC10, the theater is located in the NVIDIA booth (**#1343**) and will feature scientists, developers, and industry luminaries giving technical talks on the latest research in the HPC field.

Schedule is subject to change. For the latest info and downloadable PDF of speaker presentations visit www.nvidia.com/SC10

Tuesday, November 16th

Time	Topic / Presenter / Affiliation
10:00-10:30	**Faster, Cheaper, Better: Biomolecular Simulation with NAMD, VMD, and CUDA** John Stone, University of Illinois at Urbana-Champaign
11:00-11:30	**Parallel Programming with CUDA C** Geoff Gerfin, NVIDIA
12:00-12:30	**Large-Scale GPU Computing of Multi-Phase Flow** Wei Ge, Institute of Process Engineering, Chinese Academy of Sciences
1:00-1:30	**Supercomputing for the Masses: Killer-Apps, Parallel Mappings, Scalability and Application Lifespan** Robert Farber, Pacific Northwest National Laboratory
2:00-2:30	**Keeneland – A NSF Heterogeneous Computing Resource for Open Computational Science** Jeffrey Vetter, Oak Ridge National Laboratory/Georgia Tech
3:00-3:30	**CUDA-Accelerated Linpack on Clusters with GPUs** Everett Phillips, NVIDIA
3:30-4:00	**First Look at the World's Fastest Supercomputer-Tianhe 1** Andy Keane, NVIDIA
4:00-4:30	**Large Scale Distributed GPU Isosurfacing** Paul Navratil, Texas Advanced Computing Center
5:00-5:30	**NVIDIA Research Session: High-Productivity CUDA Development with the Thrust Template Library** Nathan Bell, NVIDIA Research

Wednesday, November 17th

Time	Topic / Presenter / Affiliation
10:00-10:30	**GPU Cloud Computing Case Study in Civil Engineering using RealityServer®** Paul Arden, mental images and Tamrat Belayneh, ESRI
11:00-11:30	**NVIDIA Research Session: GPU Computing for Computational Science** Jon Cohen, NVIDIA Research
12:00-12:30	**TSUBAME 2.0 Supercomputer** Satoshi Matsuoka, Global Scientific Information and Computing Center (GSIC) of Tokyo Institute of Technology (Tokyo Tech)
1:00-1:30	**PGI CUDA C for Multi-core x86 Processors** Michael Wolfe, The Portland Group
2:00-2:30	**Large-Scale CFD and a Full GPU Implementation of Weather Prediction Code on the TSUBAME Supercomputer** Takayuki Aoki, Tokyo Institute of Technology
3:00-3:30	**A Linear Algebra Library for Multi-core/Accelerators: the PLASMA/MAGMA Collection** Jack Dongarra, University of Tennessee
3:30-4:00	**First Look at the World's Fastest Supercomputer-Tianhe 1** Andy Keane, NVIDIA
4:00-4:30	**GPU Considerations for Next Generation Weather Simulations** Thomas Schulthess, Swiss National Supercomputing Centre
5:00-5:30	**GPU Cloud Computing 101: Getting Started** Dale Southard, NVIDIA
5:30-6:00	**Parallel Programming with CUDA Fortran** Greg Ruetsch, NVIDIA

Thursday, November 18th

Time	Topic / Presenter / Affiliation
10:00-10:30	**Parallel Nsight: A Powerful Development Environment for GPU Computing on Windows** Rafael Campana, NVIDIA
11:00-11:30	**GPU Computing: To ExaScale and Beyond** Bill Dally, NVIDIA Research
12:00-12:30	**Using GPUs to Run Next-Generation Weather Models** Mark Govett, National Oceanic and Atmospheric Administration
1:00-1:30	**A Hybrid Programming Model for Compressible Gas Dynamics Using OpenCL** Ben Bergen, Los Alamos National Laboratory
2:00-2:30	**Heterogeneous Architectures and the Green 500** Wu Feng, Virginia Tech

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