
NVIDIA
NVIDIA AT SC11
BOOTH #2719

MONDAY, NOVEMBER 14 – THURSDAY NOVEMBER 17
NVIDIA BOOTH #2719

GPU TECHNOLOGY THEATER

All talks will be live streamed on Facebook, please visit
http://apps.facebook.com/nv-supercomputing/

Monday, November 14, 2011

19:00-20:00	**2x in 4 Weeks: Getting Started with CUDA Directives** Michael Wolfe, *The Portland Group*
20:00-21:00	**CUDA Research Fast Forward** Presented by the **Pasi Fellows**, Moderated by Lorena Barba, *Boston University* Albert Sidelnik, *University of Illinois Urbana-Champaign* Christopher Cooper, *Boston University* Trevor Gokey, *San Francisco State University* Olesiy Karpenko, *University of Illinois Chicago* Anush Krishnan, *Boston University* Simon Layton, *Boston University* Ying-Wai Li, *University of Georgia* Britton Olson, *Stanford University* Juan Perilla, *University of Illinois Urbana-Champaign* Benjamin Payne, *Missouri University of Science and Technology*

Tuesday, November 15, 2011

10:00-10:30	**High Performance MPI support in MVAPICH2 for InfiniBand Clusters** Dhabaleswar K. (DK) Panda, *The Ohio State University*
10:30-11:00	**2x in 4 Weeks: Getting Started with CUDA Directives** Doug Miles, *The Portland Group*
11:00-11:30	**Programming GPUs for Performance and Portability** Michael Wolfe, *The Portland Group*
11:30-12:00	**Achievements and Challenges for Stream Computing in Molecular Simulation** Erik Lindahl, *KTH – Royal Institute of Technology*
12:00-12:30	**Introduction to CUDA C** Cliff Woolley, *NVIDIA*

12:30-13:00	**GPUs Algorithms to Explore the Origin of Mass** Richard Brower, *Boston University*
13:00-13:30	**A Methodology to Port Legacy Codes to GPU** Guillaume JL Colin de Verdière, *CEA (Commissariat à l'Energie Atomique)*
13:30-14:00	**Scalable GPU Graph Traversal** Duane Merrill, *University of Virginia*
14:00-14:30	**Routine Microsecond Molecular Dynamics Simulations using AMBER – Transformative Science with GPU Desktop Supercomputers** Ross Walker, *San Diego Supercomputing Center, UCSD*
14:30-15:00	**OmpSs: Programming Clusters of GPUs Made Easy** Jesus Labarta, *Barcelona Supercomputing Center*
15:00-15:30	**CUDA Fortran and Applications** Greg Ruetsch, *NVIDIA*
15:30-16:00	**A Linear Algebra Library for Multi-core/Accelerators: the PLASMA/MAGMA Collection** Jack Dongarra, *University of Tennessee*
16:00-16:30	**TSUBAME 2.0 Experiences-Petascale Computing with GPUs Works** Satoshi Matsuoka, *Tokyo Institute of Technology*
16:30-17:00	**PISTON: A Portable Cross-Platform Framework for Data-Parallel Visualization Operators** Ollie Lo, *Los Alamos National Laboratory*
17:00-18:00	**Application Optimization Using CUDA Development Tools** David Goodwin, *NVIDIA*

Wednesday, November 16, 2011

10:00-10:30	**Tesla Cluster Monitoring and Management APIs** Andrew Iles, *NVIDIA*
10:30-11:00	**Speeding Up Satellite Image Processing with CUDA** Jay Smith, *Digital Globe*
11:00-11:30	**Co-Design, Domain-Specific Languages and the Road to Exascale** Patrick McCormick, *Los Alamos National Laboratory*

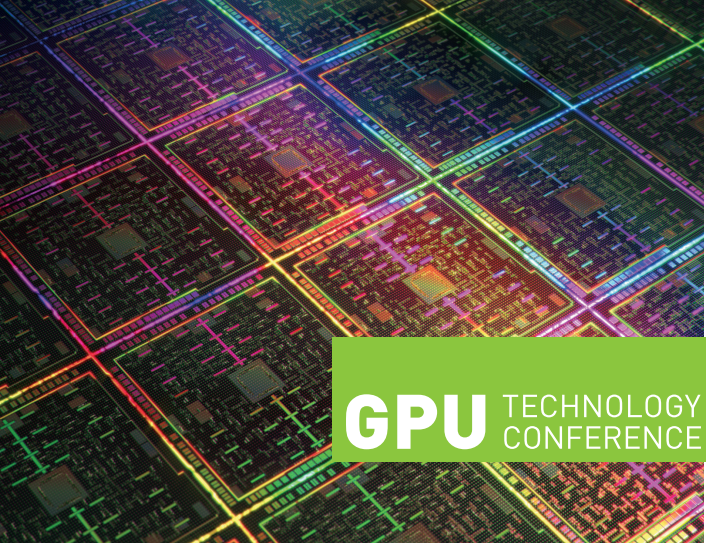
11:30-12:00	**Remote Direct Memory Access between GPUs with the APEnet 3D Torus Interconnect** Davide Rossetti, *INFN – National Institute of Nuclear Physics – Rome*
12:00-12:30	**Scientific Codes on Titan at Oak Ridge National Laboratory** John Levesque, *Cray, Inc.*
12:30-13:00	**GPU Computing Past, Present and Future** Ian Buck, *NVIDIA*
13:00-13:30	**The Oak Ridge Center for Accelerated Application Readiness: Preparing Applications for Titan** Bronson Messner, *Oak Ridge National Laboratory*
13:30-14:00	**High Level Programming Model for Accelerated Computing** Luiz DeRose, *Cray, Inc.*
14:00-14:30	**How to Run Your CUDA Program Anywhere** Wu Feng, *Virginia Tech*
14:30-15:00	**Writing Code to Survive the Manycore Revolution** Francois Bodin, *CAPS Enterprise*
15:00-15:30	**2 Petaflops Performance of a GPU Stencil Application on TSUBAME 2.0** Takayuki Aoki, *Tokyo Institute of Technology*
15:30-16:00	**Successes and Challenges using GPUs for Weather and Climate Models** Mark Govett, *National Oceanic & Atmospheric Administration*
16:00-16:30	**Why the Future of HPC will be Green** Steve Scott, *NVIDIA*
16:30-17:00	**Overview of CUDA Libraries** Ujval Kapasi, *NVIDIA*
17:00-17:30	**2x in 4 Weeks: Getting Started with CUDA Directives** Mat Colgrove, *The Portland Group*
17:30-18:00	**Why Hybrid Systems Work so Well for Simulation Based Sciences** Thomas Schulthess, *Swiss National Supercomputing Center, ETH Zurich*

Thursday, November 17, 2011

10:00-10:30	**Designing and Managing GPU Clusters** Dale Southard, *NVIDIA*
10:30-11:00	**Easy Teraflop to Petascale Supercomputing for Everyone** Rob Farber, *Irish Centre for High End Computing*
11:00-11:30	**GPGPU Computing with Amazon EC2** Deepak Singh, *Amazon*
11:30-12:00	**Energy Efficient Computing on Embedded and Mobile Devices** Alex Ramirez, *Barcelona Supercomputing Center*
12:00-12:30	**Parallel Programming with Thrust** Nathan Bell, *NVIDIA*
12:30-13:00	**GPU Computing Past, Present and Future** Ian Buck, *NVIDIA*
13:00-13:30	**CudaDMA Library: Overview and Code Examples** Brucek Khailany, *NVIDIA*
13:30-14:00	**Extreme Data-Intensive Scientific Computing on GPUs** Alex Szalay, *Johns Hopkins University*
14:00-14:30	**Patient-Specific Hemodynamics Simulations on GPU Clusters** Massimo Bernaschi, *Institute for Applied Computing National Research & Council & Computer Science Dept., University La Sapienza*
14:30-15:00	**2x in 4 Weeks: Getting Started with CUDA Directives** Mat Colgrove, *The Portland Group*

The GPU Technology Theater talks are now a part of GTC On Demand. Presentations will be made available to view and download at **http://www.gputechconf.com/gtc-on-demand.html**

Learn more about Tesla GPU Computing Solutions at **www.nvidia.com/tesla**



Advancing Global Awareness of GPU Computing

> World-class education and networking
> Hundreds of hours of technical sessions
> Access to the brightest minds in parallel computing

LEARN MORE

GTC ASIA 2011

DECEMBER 14-15, 2011 | BEIJING, CHINA
www.gputechconf.cn

GTC U.S. 2012

MAY 14-17, 2012 | SAN JOSE, CALIFORNIA
www.gputechconf.com