

GPU Technology Conference, May 14-17, 2012
McEnergy Convention Center, San Jose, California
www.gputechconf.com

Sessions on **Cluster Management** (subject to change)

IMPORTANT: Visit <http://www.gputechconf.com/page/sessions.html> for the most up-to-date schedule.

S0351 - Strong Scaling for Molecular Dynamics Applications

Sarah Tariq (NVIDIA)

Day: Tuesday, 05/15 | **Time:** 2:30 pm - 2:55 pm

Topic Areas: Molecular Dynamics; Cluster Management; Life Sciences

Session Level: Intermediate

In this session we will talk about how to improve strong scaling for molecular dynamics applications. Using the NAMD molecular dynamics code as our primary case study, we will discuss the types of issues that can impede scaling, how to use already available and custom tools to discover such issues, and how to build a model to help analyze and predict scaling performance. Although this session is primarily focused on molecular dynamics applications, most of the lessons can be applied equally well to many other areas and applications.

S0238 - Tesla Cluster Monitoring & Management APIs

Robert Alexander (NVIDIA)

Day: Thursday, 05/17 | **Time:** 9:30 am - 10:20 am

Topic Areas: Cluster Management

Session Level: Beginner

Learn more about cluster management and monitoring of Tesla and Quadro products. This includes a detailed description of the NVIDIA Management Library (NVML) and user facing third party software. Additionally, a brief summary of our out-of-band capabilities will be provided.

S0309 - Dynamically Allocating GPGPU to Host Nodes (servers)

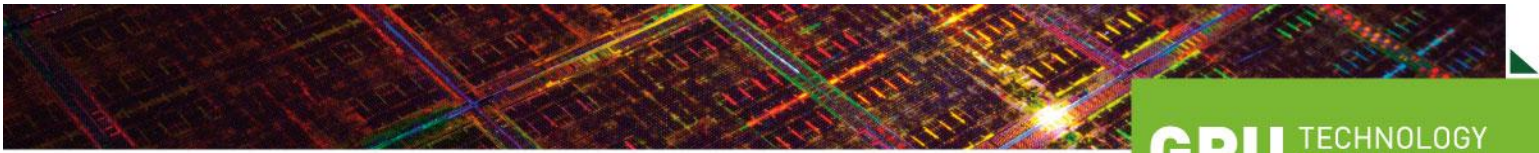
Alaa Yousif (Dell) , Saeed Iqbal (Dell)

Day: Thursday, 05/17 | **Time:** 10:30 am - 10:55 am

Topic Areas: Cluster Management

Session Level: Beginner

Learn how to remotely change the mapping of GPUs to hosts based on application needs. Audience will then be presented with example scripts and a demo illustrating how this can be implemented to improve system resource utilization.



S0119 - Best Practices for Architecting and Managing High-Performance GPU Clusters

Dale Southard (NVIDIA)

Day: Thursday, 05/17 | **Time:** 2:00 pm - 2:50 pm

Topic Areas: Cluster Management; Supercomputing

Session Level: Intermediate

An overview of designing, deploying, and managing GPU clusters for HPC. Learn to build and operate top500-class GPU computing resources that provide users with the latest CUDA features.