



## AGENDA

### HiPCNA-PG 2012 workshop

Sunday November 11<sup>th</sup>, 2012

9:00 AM – 5:30 PM

- Opening Remarks: 9:00 – 9:20 AM – Henry Huang (PNNL)
- Panel session: 9:20 – 10:00 AM (multiple participants)
- Coffee break: 10:00 – 10:30 AM
  
- Session 1 - 10:30 AM – 12:00 PM
  1. Siddhartha Khaitan and James D. McCalley (Iowa State Univ.). “EmPower: An Efficient Load Balancing Approach For Massive Dynamic Contingency Analysis in Power Systems”
  2. Oreste Villa, Antonino Tumeo, Selim Ciraci, Jeff A Daily and Jason C Fuller (PNNL). “A High Performance Computing Network and System Simulator for the Power Grid: NGNS2”
  3. Siddhartha Khaitan and James D. McCalley (Iowa State University). “TDPSS: A Scalable Time Domain Power System Simulator For Dynamic Security Assessment”
  
- Lunch (on your own) – 12:00 – 1:30 PM

- Session 2 – 1:30 – 3:00 PM

1. Shirang Abhyankar and Alexander Flueck (ANL & Illinois Institute of Technology, respectively). “Real-Time Power System Dynamics Simulation Using a Parallel Block-Jacobi Preconditioned Newton-GMRES Scheme”
2. Peter Hui and Barry Lee (PNNL). “Towards Real-Time High Performance Computing For Power Grid Analysis”
3. Mahantesh Halappanavar, Yousu Chen, Robert Adolf, David Haglin and Mark Rice (PNNL). “Towards Efficient N - x Contingency Selection Using Group Betweenness Centrality”

- Coffee break: 3:00 – 3:30 PM

- Session 3 – 3:30 – 5:30 PM

1. Christian Dufour, Vahid Jalili-Marandi and Jean Bélanger (Opal-RT Technologies (Canada)). “Real-Time Simulation using Transient Stability, ElectroMagnetic Transient and FPGA-based High-Resolution Solvers”
2. Yousu Chen, Zhenyu Huang and Mark Rice (PNNL). “Evaluation of Counter-Based Dynamic Load Balancing Schemes for Massive Contingency Analysis on Over 10,000 Cores”
3. Bertrand Haut, François-Xavier Bouchez and Fortunato Villella (Tractebel Engineering SA (Belgium)). “Improved real-time computation engine for a Dispatcher Training Center of the European Transmission Network”
4. Zhenyu Huang, Shuangshuang Jin and Ruisheng Diao (PNNL). “Predictive Dynamic Simulation for Large-Scale Power Systems through High-Performance Computing “