BES SciDAC - 22-24 July 2015

http://www.orau.gov/scidac3pi2015

Mark R Pederson

Theoretical and Computational Chemistry Basic Energy Sciences Office of Science, U.S. Department of Energy

Hyatt Regency Bethesda MD



Materials: James Davenport Chemistry: Mark Pederson

ASCR: Ceren Susut



One Need for the BES Predictive Theory and Modeling Mission



BES SciDAC Portfolio



BES SciDAC PROJECTS

- Advanced Modeling of lons in Solutions, on Surfaces, and in Biological Environments (PI: Roberto Car / Speaker: Xifan Wu Wed 3:00 PM)
- Optimizing Superconductor Transport Properties through Large-Scale Simulation (PI: Andreas Glatz / Speaker: Andreas Glatz Thu 9:45AM)
- Scalable Computational Tools for Discovery and Design: Excited State Phenomena in Energy Materials (PI: Jim Chelikowsky / Speaker Jack Deslippe, Thu 11:00 AM)
- Discontinuous Methods for massively parallel QMD: Li-ion interface dynamics from first principles (PI: John Pask / Speaker: John Pask Thu 2:30 PM)
- Predictive Computing for Condensed Matter (PI: So Hirata / Speaker Garnet Chan Thu 3:45PM)
- Simulating the Generation, Evolution and Fate of Electronic Excitations in Molecular and Nanoscale Materials with First Principles Methods (Martin Head-Gordon / Speaker: Martin Head-Gordon, Fri 9:45 AM)
- Developing Advanced Methods for Excited State Chemistry in the NWChem Software Suite (PI: Chris Cramer / Speaker: Bert de Jong, Fri 11:00AM)