



EARTH SYSTEM MODELING WORKSHOP

Friday, 11 April 2008
Center Green Auditorium

- 08:00** **Registration**
- 08:30** **Welcome and introduction – *Guy Brasseur and Tim Killeen***
- 08:45** **Questions at the Earth System Level and Modeling Tools to Address them**
 Chair: Denise Stephenson-Hawk, SERE
- Presentation: Paty Romero-Lankao & Jeff Kiehl*
- 09:20** *Break*
- 09:40** **Towards a Next Generation Climate-Weather-Earth System Model**
 Chair: Dave Bader, Dept of Energy, Lawrence Livermore National Laboratory
- Presentations:*
- 09:40-10:10** **Atmospheric Component – *Phil Rasch, Bill Skamarock & Dan Marsh***
- 10:10-10:40** **Ocean Component – *Frank Bryan & Marika Holland***
- 10:40-11:10** **Land Component – *Gordon Bonan, David Lawrence & David Gochis***
- 11:10-11:30** **Human Dimensions Activity – *Brian O’Neill***
- 11:30** **Discussion**
- 12:00** *Lunch Break (on your own)*
- 01:00** **The Computational Science of the Earth System Modeling**
 Chair: William Large, ESSL
- Presentations:*
- 01:00-01:25** **Challenges of peta and exa-scale systems – *Rich Loft***
- 01:25-01:50** **Potential for ESM Algorithmic Acceleration – *Amik St Cyr***
- 01:50-02:30** **Extracting Performance from ESM Applications – *John Michalakes and Mariana Vertenstein***
- 02:30-03:00** **Discussion**
- 03:00** *Break*
- 03:20** **Discussion: Towards a Strategic Plan**
 Chair: Greg Holland, ESSL
- **Community Participation (Management Strategy, bringing the CCSM and WRF Communities together, and strategies for including community priorities)**
 - **Developing a Weather-Climate Model (ESSL Plans, community input)**
 - **Software Framework (Desirable components to enable full ESM)**
 - **Models of intermediate complexity**
 - **Human Dimensions Issues**
- 04:35** **Remarks by Jay Fein and Sarah Ruth, National Science Foundation**
- 04:45** **Discussion and Conclusions**
 Guy Brasseur, ESSL
- 05:15** **Adjourn**