

## *Agenda*

### IACAT Workshop on **Research for Petascale Computing for Science and Technology**

**Location:** Auditorium, NCSA Building  
1205 W. Clark Street  
**Date:** April 20, 2006  
**Time:** 8:30 AM to 5:00 PM  
Breakfast and lunch provided

#### **Thursday, April 20, 2006**

- 8:00 – 8:30 Breakfast/Social
- 8:30 – 8:45 Welcome and Introduction  
Thom Dunning, National Center for Supercomputing Applications and  
Department of Chemistry, UIUC
- 8:45 – 9:30 Software Problems on the Road to Petascale Computing  
Marc Snir, Department of Computer Science, UIUC
- 9:30 – 10:15 Compilers, Libraries, and Infrastructure Software for Petascale Computing  
Wen-mei Hwu, Department of Electrical and Computer Engineering,  
UIUC
- 10:15 – 10:30 Break*
- 10:30 – 11:15 Scientific Data Mining—Challenges at the Petascale  
Chandrika Kamath, Lawrence Livermore National Laboratory
- 11:15 – 12:00 Petascale Applications and Site Requirements – How Hard Can It Be?  
Rob Pennington, National Center for Supercomputing Applications, UIUC
- 12:00 – 1:30 Lunch*
- 1:30 – 2:15 Adaptive Algorithms and Software for Partial Differential Equations  
Phillip P. Colella, Lawrence Berkeley National Laboratory
- 2:15 – 3:00 If You're Not Scared, You're Not Thinking Big Enough  
Robert J. Harrison, Oak Ridge National Laboratory
- 3:00 – 3:30 Break*
- 3:30 – 5:00 Panel Discussion
- 5:00 Closing Remarks  
Thom Dunning, NCSA and Department of Chemistry, UIUC