



The Faculty of IT and the Monash e-Research Centre  
are proud to present the following seminar - part of the  
High Definition interactive video links of  
MURPA Seminar Series 2010

## Applications on the Blue Waters Sustained Petascale System By Dr Robert Fiedler

(Blue Waters Technical Program Manager for Science and Engineering at the  
National Center for Supercomputing Applications - NCSA)

After an overview of the Blue Waters architecture and configuration, the petascale problems to be addressed by the science and engineering applications teams selected for early access to Blue Waters will be described. The key computational challenges and various approaches to overcoming them will also be discussed. \*Visit: <http://www.ncsa.illinois.edu/BlueWaters/>

### Biography:

Robert Fiedler, CSAR, University of Illinois, USA. Bob Fiedler received his Ph.D. in physics from the University of Illinois at Urbana-Champaign in 1990. He has been the technical program manager at the UIUC Center for Simulation of Advanced Rockets (CSAR) since 1998. In 1997, he was a senior technical consultant with Hewlett-Packard and before that he was a senior research programmer at NCSA where he developed a parallel astrophysics simulation package. At CSAR, he is a technical lead for integrating multiple engineering applications to perform large-scale, multidisciplinary, coupled, multiphysics simulations of complex systems. His interests include parallel application development and optimization, visualization, I/O, fluid dynamics, mesh adaptivity, and fluid structure interaction problems.

**Date:** Friday, 8 October  
**Time:** 9am-10am (coffee from 8.45am)  
**Location:** Seminar Room 135, Building 26,  
Clayton campus

**Registration by 7 Oct:** [Rob.Gray@infotech.monash.edu.au](mailto:Rob.Gray@infotech.monash.edu.au)

## MURPA Seminar Series 2010

Monash Undergraduate Research Projects Abroad (MURPA) supports a unique summer mode placement in a leading research group overseas. It not only provides a research experience at the undergraduate level, but does this in an international context. Students are placed for a period of eight weeks allowing them to integrate into the research groups as team members.

MURPA also involves an advanced seminar scheme, in which students can attend seminars given by world leading experts before they leave. The seminar scheme is novel, because it uses cutting edge High Definition interactive video links with the University of California - and often simultaneous links to Japan - making it feasible to attract some of the world's best researchers 'virtually' to Monash. These seminars also allow students to 'meet' potential UCSD mentors and obtain information about possible projects.

[https://messagelab.monash.edu.au/MURPA/MURPA2010\\_\\*](https://messagelab.monash.edu.au/MURPA/MURPA2010_*)