

Calendar/Meetings

December 2005

18-21, [2005 International Conference on High Performance Computing](#), Goa, India

January 2006

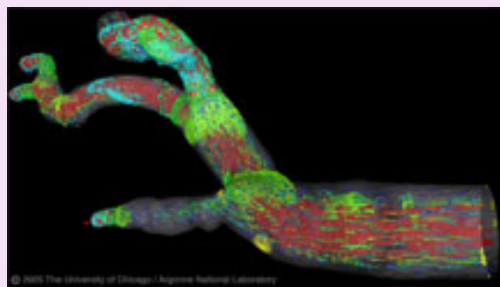
9-11, [SURA Cyberinfrastructure Workshop Series: Life Sciences Grid Application Workshop](#), Richmond, VA

9-13, [SEEK Early Career Faculty Training](#), Albuquerque, New Mexico

11-12, [15th GridPP Collaboration Meeting](#), Rutherford Appleton Laboratory, Oxfordshire, UK

[Full Calendar](#)

Image of the Week



Arterial-tree simulation. (Click on image for larger version.)

© 2005 The University of Chicago/Argonne National Laboratory, from a visualization by Joseph Insley

This visualization of a three-dimensional simulation of the human arterial tree, the branched structure of arteries on the human anatomy, was created using [TeraGrid](#) resources. The image shows several arterial branching sites, with arrows indicating the velocity of blood flow and isosurfaces indicating pressure within the artery. The simulation was

Feature Story

Distributed Classes For Distributed Computing



Sites participating in the Fall 2005 Grid Computing course.

Image Courtesy Barry Wilkinson

Grid computing is all about bringing together distributed resources, data and people, so it's fitting that one of the first undergraduate courses in grid computing would also be distributed. Since fall semester 2004, 75 students across North Carolina have learned about grid computing with the help of faculty from several institutions and the North Carolina Research and Education Network.

"This course brings state of the art computing into the undergraduate curriculum," said Barry Wilkinson from the University of North Carolina at Charlotte. "In this class the NCREN wasn't just used to transmit lectures; it was also used to create a grid infrastructure for the students."

Wilkinson, along with UNC Wilmington faculty member Clayton Ferner and a team of six faculty and students, led development for the course, which is funded by the UNC Office of the President and the National Science Foundation. Students learn about grids from the bottom up, studying technology first and applications later. Lectures are transmitted from UNC Charlotte to 12 institutions, and students complete a series of five assignments to learn how to set up and use a grid.

"We start them off with an assignment in Web services, next they generate a grid service and contact it, then they submit jobs to the Globus Resource Allocation

Profile

Dane Skow: Interoperability at Work

Twenty-two years ago, Dane Skow arrived at the Fermi National Accelerator Laboratory as a graduate student and was

immediately put to work building a front-end

electronics system for a new high energy physics experiment. Skow eventually completed his Ph.D. and chose to stay at Fermilab, where he became increasingly involved with computer science, and eventually, grid computing and the Open Science Grid.



Dane Skow

"I tell people that I am following the electrons upstream from the particle detectors," said Skow. "First it was the electronics close to the detector, then the data acquisition, then analysis farms, systems design and now administration. I've finally reached the edge of the Fermilab site, and it's time to go further."

Three weeks from now Skow will say goodbye to Fermilab and take up a joint appointment with Argonne National Laboratory and The University of Chicago as Deputy Director of the TeraGrid Grid Infrastructure Group.

[Full article](#)

Grids in the News

done with [Nektar](#), a code developed by Brown University, and visualized by The University of Chicago/Argonne National Laboratory TeraGrid resource provider.

[Link of the Week](#)

FightAIDS@Home

Join the World Community Grid and fight AIDS at home by contributing your computer's idle resources to a search for drugs that can disable a key step in the life cycle of HIV, the virus that causes AIDS. Your resources will be used to search for drugs which can attach to the HIV-1 protease receptor in a way that blocks its ability to function as an enzyme, preventing the virus from spreading further in the body and developing into AIDS.

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Office of Science/
U.S. DOE

Manager (GRAM), use a scheduler and a workflow editor," explained Ferner. "The goal is to train students who will one day support or implement research on grids."

[Full article](#)

Astronomy Data Pipeline Tackles First Challenge

NCSA News Release, December 6, 2005

URBANA, IL — The National Center for Supercomputing Applications (NCSA) is leading the development of data-management and data-processing tool for the Dark Energy Survey (DES), a multi-institution collaboration aimed at discovering the nature of "dark energy," a mysterious substance discovered in 1998 that is causing the expansion of the universe to accelerate rather than slow down.

[Read More...](#)

Grids To Aid Breast Cancer Diagnosis And Research, Europe

Medical News Today, December 11, 2005

The millions of mammography exams performed each year in Europe save thousands of women's lives, but if the data from all breast cancer screening procedures was made available to clinicians and researchers across the continent they could save many more.

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