

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](#)

Feature Story

World Wide Webcast Features Grids



On Thursday, December 1, more than 13,000 people from over 100 countries tuned into a live webcast celebrating the World Year of Physics and Albert Einstein. The Beyond Einstein webcast, organized by CERN, included segments on subjects ranging from time travel to neutrinos to grid technology, transmitted from around the globe and headlined by Nobel laureates, physics visionaries and computing pioneers.

Webcast viewers tuned in to see "THE GRID," a panel discussion broadcast from Imperial College London and hosted by BBC reporter Gareth Mitchell. Bob Jones, project leader of Enabling Grids for E-Science, Carl Kesselman from the Information Sciences Institute, Neil Geddes from the Rutherford Appleton Laboratory and Bruce Allen from Einstein@Home discussed definitions of grid computing, how high-energy physicists are using it, distributed computing projects accessible to individuals and their personal computers, and the future of the Grid. Panelists also answered questions emailed from viewers as far away as Malaysia.

Later in the program, grid-generated musical entertainment provided a break from the science. In "GRID sonifications," Domenico Vicinanza from Italy demonstrated music composed using the INFNGrid. Data is represented by sound in a sonification, and Vicinanza turned the

From the Editor

This will be 2005's last issue of Science Grid This Week. SGTW will return Wednesday, January 11 after a two-week vacation. Happy Holidays!

Workshop Encourages Collaborative Grid Deployment



A group of collaborators—previous and potential—heads to dinner.

Image credit: Jerry Perez, Texas Tech University

The Second Southeastern Universities Research Association Cyberinfrastructure workshop, Grid Application Planning & Implementation, was held December 6–8 at the Texas Advanced Computing Center in Austin. The SURA workshop emphasized collaborative grid development and deployment, and was open to those wishing to learn how to apply grid technology to advance scientific and other applications. Participants included grid and application developers, users from various communities, grid technology implementers and industry partners.

The workshop raised awareness of the diverse set of projects and initiatives that are helping to mature grid technologies while encouraging collaboration across different areas of grid and application deployment. Presenters provided insight into grid-enabling specific applications, identified resources for building and operating a grid, and described several specific grid implementations, including the Open Science Grid, the Distributed Organization of Scientific and Academic Research, the University of Texas at Austin's UTGrid

Image of the Week



CTIO 4-meter telescope. (Click on image for larger version.)

Image credit NOAO/AURA/NSF

The [Dark Energy Survey](#) collaboration will use the [Cerro Tololo Inter-American Observatory's](#) 4-meter telescope, located in Chile, to discover the nature of dark energy. This mysterious substance, which causes the expansion of the universe to accelerate rather than slow down, will be studied using a new, large (0.5 gigapixel) camera installed on the telescope. The flood of data generated by the survey will be stored, managed, shared, mined and visualized using cyberinfrastructure developed by a collaboration of scientists from the National Center for Supercomputing Applications, the University of Illinois, Fermilab and the National Optical Astronomy Observatory.

Link of the Week

Mt. Etna Sonifications

Visit this site to hear sonifications of the seismic activity of Mt. Etna, a volcano located in Sicily, and to learn more about grid-enabled sonification. Data sonification is the representation of data by means of sound, and it can provide a quick and effective data analysis and interpretation tool in various fields. This researcher uses the INFNGrid to turn seismograms into sounds. To hear a more musical version of the sonifications, play the "Etna seismograms sonified with MIDI mapping" version near the bottom of the page.

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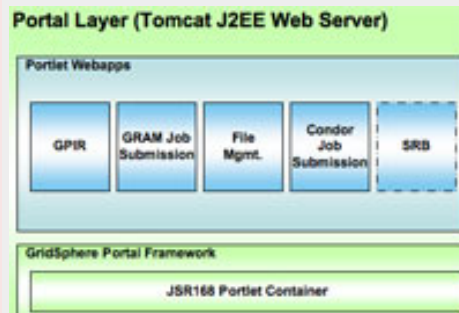
Office of Science/
U.S. DOE

first few sentences of one of Einstein's papers, as well as the seismic activity of the Mt. Etna volcano, into music using grid computing.

The Beyond Einstein webcast is archived and can be viewed [online](#).

—Katie Yurkewicz

GridPort Software Empowers Users



One section of the GridPort v4.0 architecture.

Grid computing technologies provide important capabilities such as more efficient utilization of existing resources, aggregation to have more power at once, and coordination of resources to automate workflows. However, grid computing tools can have a steep learning curve. To lower the barrier of entry for grid computing novices, simple interfaces can greatly simplify the use of these tools.

The GridPort Toolkit, a collaborative software project developed under the leadership of the Texas Advanced Computing Center (TACC), presents a consistent, streamlined set of portal interfaces for using grid technologies and services. GridPort augments these grid technologies with rich, customizable Web interfaces for displaying resource information, job scheduling and file/data management—all in a lightweight, modular, easy-to-use package.

"The GridPort team and its collaborators have made it easier for people to use vast amounts of computational power, storage capacity and visualization and rendering capabilities to be effective in knowledge discovery," says Jay Boisseau, director of TACC.

and the University of Michigan's MGRID. The workshop also included a preview of the Grid Technology Cookbook currently under development by SURA, the Open Science Grid and IT consultant Mary Trauner.

[Full article](#)

Grids in the News

A bright outlook for global weather forecasting

Innovations Report, December 19, 2005

A group of national weather centres across Europe are harnessing the power of GÉANT2, Europe's next generation high-speed research and education network, to create a global weather forecasting system that allow meteorologists to make more accurate and timely predictions quicker.

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Colleges boosting bandwidth

Indianapolis Star, December 16, 2005
By Will Higgins

Several years ago, Purdue University research scientist Chris Hoffman wanted to learn precisely what happened when the hijacked airplane struck the Pentagon on Sept. 11.

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How to analyse a Big Bang of data

Education Guardian, December 15, 2005

By Kim Thomas

"Everybody comes through the door whistling in the morning," Sverre Jarp, chief technical officer at CERN, tells me over coffee.

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