

Calendar/Meetings

December 2005

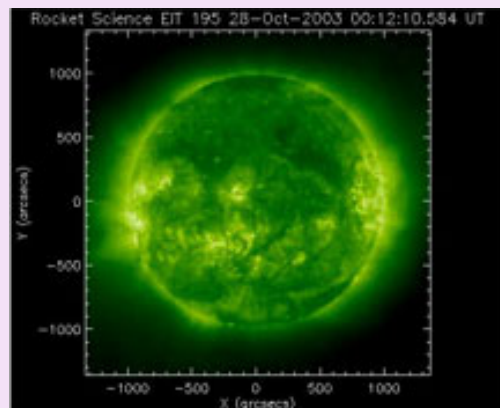
5-8, [International Conference on e-Science and Grid Technologies](#), Melbourne, Australia

6-8, [SURA Cyberinfrastructure Workshop Series: Grid Application Planning & Implementation](#), Austin, Texas

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

[Full Calendar](#)

Image of the Week



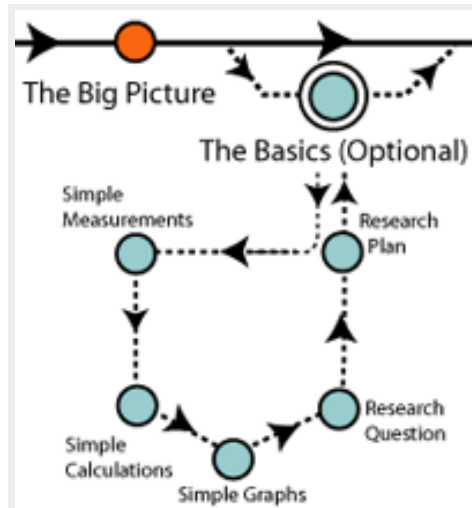
Frame of a movie of SOHO EIT solar images. (Click on image for larger version.)

Image courtesy of the SOHO EIT Consortium

This movie of solar images from the [Solar and Heliospheric Observatory's Extreme Ultraviolet Imaging Telescope \(SOHO EIT\)](#) was made with the Solar Movie Maker, one of AstroGrid's first Science Services. AstroGrid, a project funded by the UK Particle Physics and Astronomy Research Council and the European Union's Framework 6 program, is an open source project to create a

Feature Story

Grids in Class and at the Museum



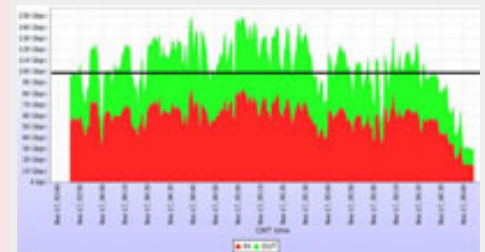
Part of the e-Lab study guide, a workflow for student learning.
Image Courtesy of Liz Quigg

Do people learn more about science when they experiment with real data? The leaders of the Interactions in Understanding the Universe initiative think so, and they are using the grid to get data from current experiments into classrooms and museums.

"The idea behind I2U2 is to have a framework available so that when an experiment joins the grid, a toolkit and consultants will be ready to help them build a formal and informal educational program," said Marjorie Bardeen from Fermilab, one of the I2U2 principal investigators.

The I2U2 goal is to support and strengthen the education and outreach activities of grid-based scientific experiments. The project, recently funded by the National Science Foundation, will provide two options to scientists building an educational program: e-Labs, for use by students in a formal educational setting; and i-Labs for informal education, such as museum exhibits. The I2U2 team of teachers, scientists and grid developers is creating an e-Lab toolkit for use by scientific collaborations, and is piloting the i-Labs with the Chicago's Adler

High Energy Physics Team Smashes Network Record



Three-hour snapshot of total bandwidth usage. The official measurement took place shortly after 04:00 GMT.

A team of physicists, computer scientists and network engineers recently shattered the world network speed record, transferring physics data at a rate of over 150 gigabits per second to capture first prize in the SC|05 Bandwidth Challenge. At that rate, all of the printed content of the Library of Congress could be transmitted in only 10 minutes.

SC|05, the Supercomputing 2005 conference, sponsored the contest that challenged scientists and networking engineers to create the best and most advanced techniques for using vast amounts of data and showcasing it on advanced networks.

The team, led by the California Institute of Technology, Fermi National Accelerator Laboratory, the Stanford Linear Accelerator Center and the University of Michigan, won the Challenge on November 16 with an official measured throughput of 131.6 Gbps on 17 of the 22 optical fiber links used in the entry. In preparation for its third consecutive win, 475 terabytes of high energy physics data was transferred in 24 hours, with average data rates of more than 100 Gbps sustained for several hours.

[Full article](#)

Grids in the News

working Virtual Observatory for UK and international astronomers. SOHO is an ESA-NASA program of international cooperation.

Statistic of the Week

75

A total of more than 75 teraflops (trillions of floating-point operations per second) of peak computational capacity is available from the [TeraGrid's](#) Resource Provider sites.

Source: TeraGrid brochure

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[XML](#) [RSS Headlines](#)



 Office of Science/
U.S. DOE

Planetarium.

A pilot e-Lab is already up and running. The QuarkNet/Grid Cosmic Ray e-Lab provides a framework for student-driven investigations with experimental particle physics data. Since the spring of 2005, students from 240 high schools have run 11,000 analyses on data collected from 200 cosmic ray detectors across the country. Students use grid tools and a Web interface to access the data, perform experiments, publish their data through online posters, and even discuss their results.

[Full article](#)

Programme launched to promote use of grid computing in schools

Channel News Asia, December 6, 2005
by Julia Ng

Singapore is unleashing the power of Grid Computing into its schools and industries.

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Web-based system will speed drug discoveries

Indiana University Press Release, December 1, 2005

BLOOMINGTON, Ind. -- The process of developing new disease-fighting drugs will be accelerated because of research now under way at the Indiana University School of Informatics and the IU Community Grids Lab.

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