

Calendar/Meetings

March

26-28, [PRAGMA 10: Pacific Rim Applications and Grid Middleware Assembly Tenth Workshop](#), Townsville, Queensland, Australia

28-30, [Main Street Supercomputing: The Convergence of HPC and Grid Computing](#), Newport, Rhode Island

April

2-6, [High Performance Computing Symposium \(HPC 2006\)](#), Huntsville, Alabama

3-7, [ICDE '06: The 22nd International Conference on Data Engineering](#), Atlanta, Georgia

[Full Calendar](#)

Image of the Week



The MAGIC telescope. (Click on image for larger version.)

Image Courtesy Robert Wagner, Max Planck Institute of Physics, Munich

[MAGIC](#) is a ground-based air Cerenkov telescope for gamma-ray astronomy. Located in the Canary Islands and operated by an

Feature Story

From Archaeology to Alzheimer's Disease on EGEE



User Forum participants attend a plenary session.

Photo Credit Catalin Cirstoiu, CERN

When the organizers of the EGEE User Forum started planning for the first event aimed at bringing the growing EGEE user community together, they expected at most 140 people to register. Imagine their surprise when more than 240 people registered to attend, and they receive more than 90 abstracts from a range of new and established applications.

"We got an amazing variety of abstracts submitted," said CERN's Massimo Lamanna. "Just glancing through the titles is really interesting, you see applications you'd expect—biology, high-energy physics—and others like online gaming and archaeology."

Scientists shared their research results and plans through presentations and posters. Protein sequencing, medical imaging, fusion energy research, gamma-ray astronomy, climate modeling, earthquake simulations and quantum chemistry were only a few of the applications discussed. Digital radio broadcasting, financial modeling, and research from outside Europe, such as Taiwan's National Digital Archive Project, were also highlighted.

[Full article](#)

TeraGrid Maps the Future



Attendees of the quarterly TeraGrid meeting gather outside RENC I headquarters.

Photo Credit Josh Coyle, RENC I

Partners in the National Science Foundation's TeraGrid project held their quarterly meeting in Chapel Hill, NC, March 13–15, where they discussed the impact of TeraGrid resources and infrastructure on scientific discovery and strategies for involving the broader research community in the TeraGrid.

Built and implemented over the last four years, the TeraGrid is the world's most comprehensive distributed cyberinfrastructure for open scientific research. Through high performance network connections, the TeraGrid integrates high performance computers, data resources and tools and high-end experimental facilities around the country. The TeraGrid currently serves over 1,600 scientists and engineers who use computational, data management and visualization resources at eight sites across the United States.

The Renaissance Computing Institute hosted the meeting. RENC I Director Dan Reed helped develop the TeraGrid project in 2001 as director of the National Center for Supercomputing Applications, coining the term TeraGrid to describe a grid infrastructure capable of moving and analyzing trillions of bytes—terabytes—of data. RENC I contributes to the TeraGrid through the Science Gateways initiative, which works to make TeraGrid resources accessible to new communities of users through common Web portal interfaces.

international collaboration of 17 institutions, the telescope will be used to search for sources of very-high-energy gamma rays, such as active galactic nuclei, supernova remnants and gamma-ray bursts. Analysis of MAGIC data is based on Monte Carlo simulations, and the collaboration needs more CPU power to simulate all the necessary data. Since March 2005, the collaboration has run four Monte Carlo data challenges using EGEE resources.

[Link of the Week](#)

CyberInfo Beat

CyberInfo Beat is the newsletter of the Engaging People in Cyberinfrastructure (EPIC) collaboration. The EPIC goal is to raise awareness of the opportunities afforded through cyberinfrastructure and to educate and train a diverse group of people to fully participate in the cyberinfrastructure community. CyberInfo Beat helps create awareness of such opportunities with links to resources for teaching and learning, seminars, workshops and conferences, news articles, funding opportunities, job openings and more.

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 Office of Science/
U.S. DOE

Reports Highlight Role of Grid, Cyberinfrastructure

Judging by the publication of three recent reports, 2006 may well be the year when grids truly move mainstream. On January 20, the United States' National Science Foundation released its "Cyberinfrastructure Vision for 21st Century Discovery." On February 28, the Australian Minister for Education, Science and Training released the "Strategic Roadmap for the National Collaborative Research Infrastructure Strategy." And finally, on March 2, the Paris-based Organization for Economic Co-operation and Development released its report on "Grids and Basic Research Programmes." Each of these reports makes strong recommendations of support for e-infrastructure or cyberinfrastructure, or grids; each speaks to the importance of governments and public funding agencies developing a coordinated policy driven approach to the establishment of infrastructure to support global collaborative research activity; and each heralds the implications of such infrastructure across the economy and society in general.



NSF'S Cyberinfrastructure Vision for 21st Century Discovery

"The comprehensive infrastructure needed to capitalize on dramatic advances in information technology has been termed cyberinfrastructure. Cyberinfrastructure integrates hardware for computing, data and networks, digitally enabled sensors, observatories and experimental facilities, and an interoperable suite of software and middleware services and tool. Investments in interdisciplinary teams and cyberinfrastructure professionals with expertise in algorithm development, system operations, and applications development are also essential to exploit the full power of cyberinfrastructure to create, disseminate, and preserve scientific data, information, and knowledge." So cyberinfrastructure is defined by the NSF.

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[Grids in the News](#)

Let me hear your body talk: UH scientists mine biomedical data
Supercomputing Online, March 16, 2006

Five University of Houston researchers are teaching computers how to listen when your body talks.

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AIP FYI #37: Ehlers and Holt Seeking Signatures for NSF Funding Letter

American Institute of Physics, March 15, 2006

Time is of the essence for constituents who support a 7.9% increase in the National Science Foundation's budget... Recently, NSF has pioneered cutting-edge research in cyberinfrastructure, the information technology-based infrastructure increasingly essential to science and engineering leadership in the 21st Century.

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UCI receives major grant to help create national methods and standards for functional brain imaging

University of California, Irvine Press Release, March 13, 2006

A nationwide consortium of researchers, led by UC Irvine brain imaging specialist Dr. Steven Potkin, has received a \$24.3 million grant from the NIH's National Center for Research Resources to standardize functional magnetic resonance imaging and help make large-scale studies on brain disease and illness possible for the first time.

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Walter Stewart's article originally appeared in GRIDtoday.