

Calendar/Meetings

March

1-3, [First EGEE User Forum](#), CERN, Geneva, Switzerland

7-8, [Second CLEANER All-Hands Meeting](#), Arlington, Virginia

13-15, [ISSSE 06: International Symposium on Secure Software Engineering](#), Washington, D.C.

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

[Full Calendar](#)

Feature Story

Grid Technology Helps UNOSAT Tackle Humanitarian Challenges



CERN's Patricia Mendez Lorenzo and UNOSAT's Einar Bjorgo have adapted satellite imagery tools to the Grid.

Patricia Mendez Lorenzo is part of the LHC Computing Grid's Experiment and Integration Support Team at CERN. Normally she supports the ALICE particle physics experiment, helping LCG sites to install and run the ALICE software. But last summer she was assigned an additional task: to help gridify satellite imagery applications for UNOSAT, a United Nations initiative that provides the humanitarian community with access to satellite imagery for use in crises such as earthquakes and tsunamis.

CERN has hosted the UNOSAT team for the past four years, so that it can benefit from CERN's substantial IT infrastructure and Internet access. Tapping into CERN's grid know-how was another reason, and last year a summer student project, supervised by Mendez Lorenzo and Einar Bjorgo of UNOSAT, provided an ideal opportunity to push forward on this front.

With Sean Moran, a student from Cambridge University, they began by transferring some 3.5 terabytes of data on the Asian tsunami to the CASTOR storage management system. They then set up a software infrastructure to enable the UNOSAT team to access the data using standard LCG tools. At the same time, Mendez Lorenzo and Bjorgo created a virtual organization for UNOSAT, with a view to extending

International Cyberinfrastructure: Activities Around the Globe



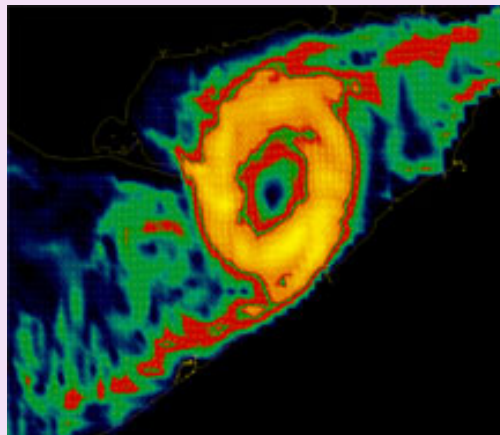
Image © CERN

In the current issue of [CTWatch Quarterly](#), scientists from around the world discuss their country's cyberinfrastructure projects. Australia, Brazil, India, Japan, Korea, South Africa, Taiwan, and the multinational PRAGMA project are all profiled. Below is an excerpt from the issue's introduction, written by Thom Dunning and Radha Nandkumar of NCSA.

Cyberinfrastructure is now essential for advancing scientific discovery and the state-of-the-art in engineering. It doesn't matter whether it's the inner workings of the universe or the inner workings of the economy, the design of a new chemical process or the design of a new material, new insights into how cells function or the delivery of personalized medicine, the spawning of a tornado or planning urban development. The basic fact remains the same—cyberinfrastructure is now a driver of science and engineering. Without it, science and engineering will not reach their full potential.

But, science and engineering is a global activity. There is not an American chemistry and a French chemistry, nor is there a Japanese electrical engineering and a Brazilian electrical engineering. Scientists and engineers around the globe are focused on unraveling the secrets of nature and applying this hard gained knowledge to the betterment of humanity. Cyberinfrastructure must

Image of the Week



Lake Erie surface water velocities. (Click on image for larger version.)

Image Courtesy Mark L. Green, CCR

Researchers in the Grid Resources for Advanced Science and Engineering (GRASE) VO at the State University of New York at Buffalo run hydrodynamic models continuously during the algae growing season in order to track observed harmful algal blooms within the Great Lakes. Grid resources enable forecasts of bloom

movements from several days to several weeks. The GRASE VO provides a science gateway for scientists from several disciplines.

Link of the Week

TryScience - The Grid

A fun way to learn about grid computing, Tryscience.org's interactive site teaches visitors which types of problems are best addressed by personal computers, supercomputers and large grid networks, how to prioritize grid applications, and how grid computing can be used to solve large scientific problems. The activity is sponsored by IBM's World Community Grid.

[PDF Version for Printing](#)

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



 Office of Science/
U.S. DOE

this to other sites around the globe that UNOSAT collaborates with. In this way, in future this sort of data can be stored in a truly distributed way.

[Read the full article by Francois Grey in the CERN Computer Newsletter](#)

Announcement

NCSA Summer Fellowships for Faculty in Cyberinfrastructure



The National Center for Supercomputing Applications will award six summer fellowships to faculty interested in contributing to the creation of a national cyberinfrastructure for science and engineering. The fellowships are available to researchers from across the country. The deadline to apply has been extended to March 15.

The fellowships will provide 10 weeks' salary and will cover local housing expenses and the cost of travel to and from Champaign, Illinois. Areas of interest include:

Cyberenvironments: NCSA is creating cyberenvironments that will simplify the integration of distributed computing and data resources into scientific and engineering research. We look forward to working with faculty who specialize in scientific and engineering applications, graphical user interfaces and portals, workflow and collaboration software, and data analysis and visualization tools.

Cyber-resources: NCSA provides high-end computing resources needed by the scientific and engineering communities. We want to spend the summer with faculty who are researching ways to make these resources better suit the communities they serve and to improve the computing infrastructure that they operate in.

Innovative Systems: Petascale computing is now a realizable goal that will impact all scientific and engineering research, but the best

support this global activity. In fact, it is our belief that cyberinfrastructure, properly designed and constructed, will advance science and engineering as a global activity by facilitating access to resources and expertise wherever they are located.

[Full article](#)

Grids in the News

Princeton Professor Foresees Computer Science Revolution

Supercomputing Online, February 20, 2006

At the annual meeting of the American Association for the Advancement of Science, Bernard Chazelle, professor of computer science at Princeton University, plans to issue a call to arms for his profession, challenging his colleagues to grab society by the lapels and evangelize the importance of studying computer science.

[Read More...](#)

India to surf on a different bandwidth

Daily News & Analysis Mumbai, February 18, 2006

By Dhananjay Khadiolkar

Internet 2, a high-speed connectivity network, will soon hit Indian shores and support interconnectivity and collaboration between research communities in India and the US.

[Read More...](#)

Global grid for Big Bang research reaches milestone

Computerworld, February 17, 2006
by Todd R. Weiss

A huge 100,000-PC grid-computing network being built to help research the origin of the universe passed the third of four major tests recently when it reached a data-transfer milestone, with up to 1GB/sec. of physics data sent over the global grid.

[Read More...](#)

pathway to petascale computing is unclear. Come and explore those possibilities with us.

Cyberenvironments in the Classroom: Few of the advantages of a national cyberinfrastructure will be realized without scientists and engineers who understand the new capabilities that it provides. NCSA is interested in collaborating with faculty to bring cyberenvironments into the classroom.

—*Trish Barker, NCSA*

[More information](#)

Higgs Boson a-go-go

The Register, February 15, 2006
By Chris Williams

Physicists have trialed an international computing grid that will help probe the moments following the Big Bang.

[Read More...](#)