

Calendar/Meetings

October

13-18, [International ICFA Workshop on Grid Activities Within Large Scale International Collaborations](#), Sinaia, Romania

15-18, [PRAGMA 11](#), Osaka, Japan

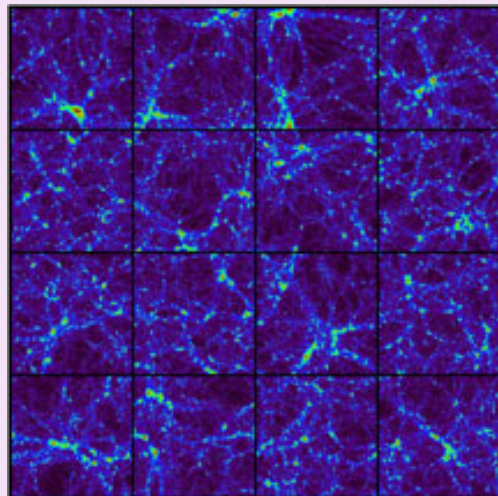
21-23, [GCC2006: The Fifth International Conference on Grid and Cooperative Computing](#), Changsha, China

23-25, [2006 BIRN All-Hands Meeting](#), La Jolla, California

26-27, [EGEE Industry Day](#), Catania, Italy

[Full Calendar](#)

Image of the Week



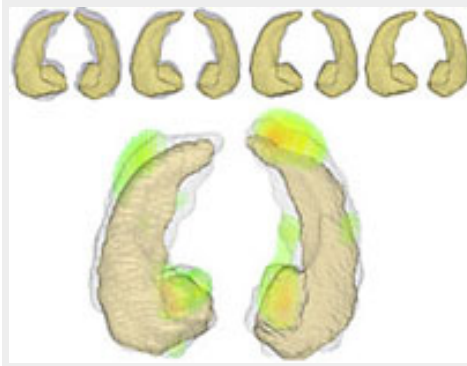
Simulations produced to study statistical properties of substructures within dark matter halos.

Image Credit HORIZON/C. Pichon, D. Aubert.

The [HORIZON project](#) is led by a

Feature Story

Mapping Tool Spots Brain Disorders



An advanced mapping tool developed by BIRN researchers was used to distinguish normal from diseased brain scans.

Image Credit Timothy Brown, BIRN, CIS at Johns Hopkins University

Brain diseases are challenging to diagnose, which can confuse or delay beneficial treatments. Now, researchers in the Biomedical Informatics Research Network (BIRN) are using specific structural or shape differences in patients' brains to help identify brain disorders. "Using TeraGrid resources at multiple sites, this research has been able to successfully distinguish diagnostic categories such as Alzheimer's and Semantic Dementia from control subjects," said Anthony Kolasny of the Center for Imaging Science (CIS) at Johns Hopkins University. "This can potentially lead to a powerful new cyberinfrastructure tool clinicians can use to make earlier, more accurate diagnoses."

The BIRN Network, under the direction of UC San Diego Professor Mark Ellisman and funded by the National Institutes of Health/National Center for Research Resources, is an innovative and award-winning geographically distributed virtual community of shared resources offering tremendous potential to advance the diagnosis and treatment of disease.

'Me-Science' the New e-Science

"It's not 'e-science,' it's 'me-science.'" This was the conclusion of Carole Goble from the University of Manchester, having given one of the most popular and well-attended keynote speeches of the EGEE'06 conference.



Carole Goble spoke at EGEE'06. *Image Courtesy Owen Appleton, EGEE*

Having worked closely with scientists, specifically in life sciences, Goble said that our understanding of the true motivations of scientists is essential for the development of Grid technologies. "We're not building infrastructures for e-science, we're building them for e-scientists," she explained.

Goble presented the controversial viewpoint that while scientists are motivated by advancing the frontiers of science, this is not necessarily the principal motivation. Instead, she suggested, they are motivated in large part by getting the best results first, in order to gain, among other perks, more funding.



[Full article](#)

This article by Helen Thomson originally appeared in [GRIDtoday](#) as part of a series of dispatches from EGEE'06.

consortium of French institutions that studies galaxy formation in the cosmological context of an expanding universe dominated by dark matter and dark energy. HORIZON's goal is to federate numerical simulation activities that take place in galaxy and large-scale structure formation. In 2005-2006, the HORIZON project uses [DEISA](#), the Distributed European Infrastructure for Supercomputing Applications, and has set up the [HORIZON grid](#), which links computational resources at six institutions.

Link of the Week

New caBIG™ Public Site

A new caBIG™ Web site for the public is now available. The site includes videos, animations, activities and text that explains how information technology helps fight cancer.

[PDF Version for Printing](#)

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



Office of Science/
U.S. DOE

[Full article](#)

This article, written by Paul Tooby, originally appeared on the San Diego Supercomputer Center's Web site.

Grids in the News

One Man's Grid...

Dr. Dobb's Journal, October 9, 2006
By Jonathan Erickson

Between Grids and Griddles, distributed computing is a hot topic these days.

[Read More...](#)

Swiss researchers join forces to capitalise on Grids

EGEE Press Release, October 6, 2006

The Swiss Grid Initiative was officially launched last week during the EGEE'06 conference.

[Read More...](#)

LSU Among First to Gain Access to Improved SURAGrid

LSU Press Release, October 3, 2006

Thanks to a recent agreement between IBM and the Southeastern Universities Research Association, or SURA, member universities will soon have access to a vastly improved regional network of high performance computing resources through the SURAGrid Program.

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Grid in Computational Biology

the globus consortium  journal

In the recent years there have been an unprecedented accumulation of biological information. Genomes of over 500 organisms were completely sequenced and over 800 are at various levels of completion. To analyze this information for the needs of biomedical research, bioremediation and agriculture one needs high-throughput computational environments that integrate large amounts of genomic and experimental data, and bioinformatics tools for knowledge discovery and data mining. Most of these tools and algorithms are very CPU-intensive and require substantial computational resources. The large-scale, distributed computational and storage infrastructure of the Grid offers an ideal platform for mining such large volumes of biological information. hundreds terabytes of data. Because of recent advances in genetics, bio-informatics, and grid technology, we can now learn more about the way genes have adapted to changing ecosystems.

One of the major approaches in bioinformatics is comparative analysis. The availability of large volumes of genomic data now allows for systematic comparison of genomes of organisms originating from different taxonomic groups, displaying various levels of complexity in their biological organization and residing in a different of environments.

[Full article](#)

This article, an interview with Natalia Maltsev and Dinanath Sulakhe from Argonne National Laboratory, originally appeared in the [October issue](#) of the [Globus Consortium Journal](#).