



Open Science Grid — Education, Outreach & Training

Working Towards Global Shared Cyber-Infrastructure

Mission of OSG ETO

- Organize and deliver **training** for OSG end users and site administrators
- Support **new communities** in joining the OSG
- Engage **undergraduate** and early graduate students in (e)Science and CS, and reach **high schools** through I2U2
- Reach out to under-represented communities, by engaging and assisting **minority students and minority serving institutions** by providing OSG resources and opportunities; and by strengthening and assisting emerging, underserved regions of the world to form bonds to US science and grid communities, focusing on **Latin America and Africa**.

The OSG will take High Throughput Computing to the next level, to transform data-intensive science through a cross-domain, self-managed national distributed cyber-infrastructure. It will bring together campuses and communities and facilitate the needs of Virtual Organizations at all scales. The OSG Consortium includes many universities, national laboratories, scientific collaborations and software developers working together to meet these goals.

Community Outreach

OSG ETO supports under-represented and under-resourced communities in US, Latin America and Africa through workshops, technical assistance and grid access, and an international students and faculty exchange.

High School Education is supported through the powerful I2U2 program.



End User Education

OSG EOT provides in-person workshops where students get hands-on experience working with leading grid-tools, and online training for those who can't get to one of our workshops.

We've also created the EOT Virtual Organization for student engagement, access and support.

Site Administrator Training

The OSG EOT trains site administrators in the setup and support of their OSG sites using the OSG/VDT software stack.



We can bring our grid school to your university campus!



Open Science Grid

www.opensciencegrid.org/workshops

Grid Education Opportunities

Self-paced / online instruction

www.ci.uchicago.edu/osgedu/schools/gridlab/

Includes lectures and labs on grid technologies, with flexible roadmaps for navigating the material. You can access the online community for support or come to our online office hours.

2007 Workshop Program

www.opensciencegrid.org/workshops

- OSG Collaboration Meeting, Mar 5-7
- Argentine Grid Workshop, Mar 12-14 at Santa Fe
- Midwest Grid Workshop, Mar 24-25 at U of Illinois at Chicago, Jointly sponsored by UIC and Northwestern University
- South Africa Workshop, IFIP School on Software Technology & Engineering
- TeraGrid Conference, Jun 2007
- Rio Grande Grid Workshop, Jul 2007, University of Texas at Brownsville, coordinated with UT-Pan American
- Great Plains Grid Workshop, Aug 2007, University of Nebraska-Lincoln
- SC'07 tutorial, Nov 2007



International Outreach

The OSG ETO is committed to international outreach as a part of its mission. Recent Grid schools in Argentina and the South Africa Program are examples. We are also developing projects for Pan-Am and South African schools.

The Education Virtual Org.

The OSG EDU VO includes a wiki, email lists, followup discussions and other helpful tools to support you in using the OSG in your classes. Our staff will work with you to find the right way to get your students engaged in the OSG.

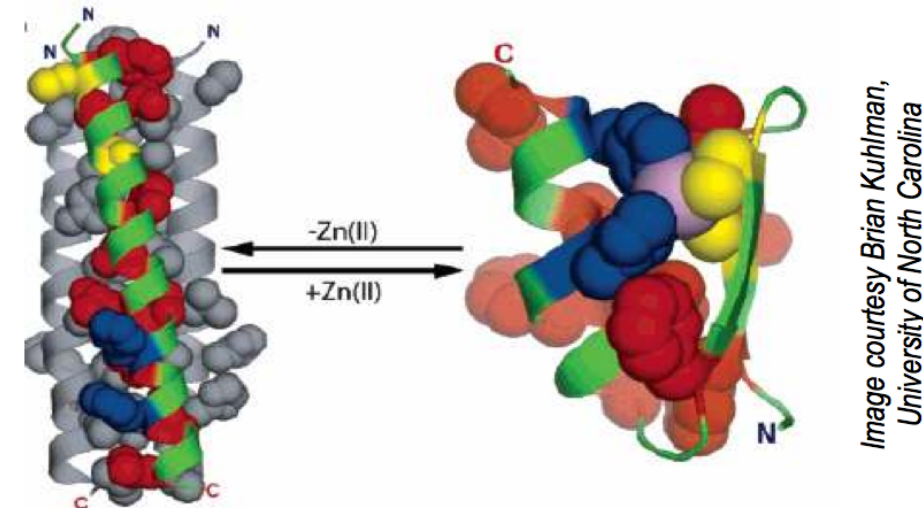
We also post learning and other grid-related opportunities for students.

twiki.grid.iu.edu/twiki/bin/view/VO/OSGEDU

Who Uses the Open Science Grid?

Computational Biologists

Scientists at the University of North Carolina are running Rosetta, a powerful tool to aid in designing protein structures. They have consumed 100,000 CPU-hours designing ten proteins.



High-Energy Physicists

MiniBooNE — an experiment attempting to confirm the existence of a new type of neutrino, one of the fundamental particles of the universe — has consumed over 800,000 CPU-hours.

OSG provided 300,000 CPU-hours to the DZero experiment for one of the most precise measurements to date of the top quark mass.

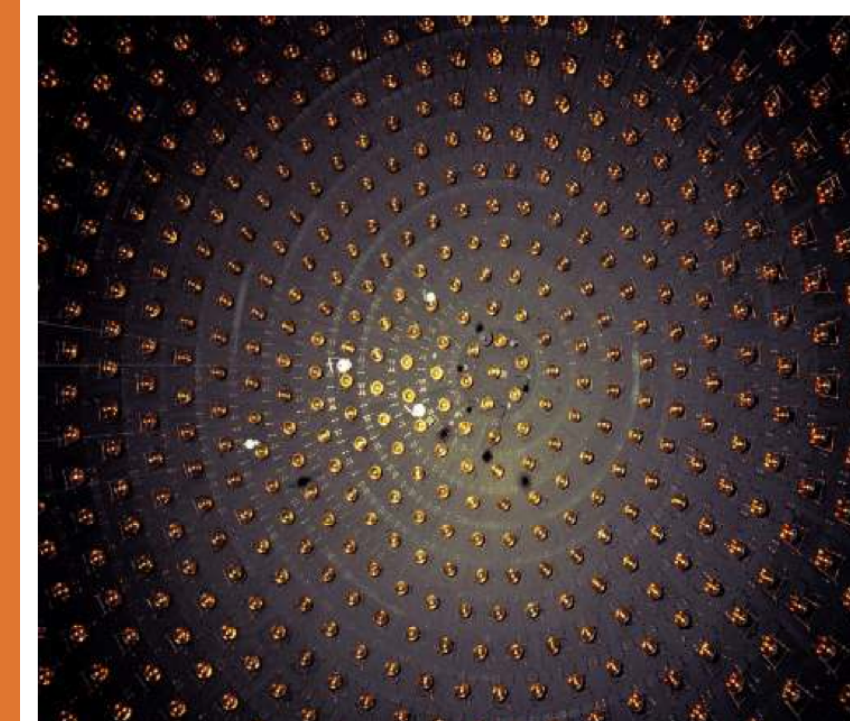


Image courtesy, Reider Hahn, Fermilab

Mathematicians

A single investigator at LeHigh University made opportunistic use of resources to solve a mathematical challenge exemplified by a football match lottery game: "What is the minimum number of tickets you must buy to guarantee that you hold a winning ticket?"

Given a match of six games, he has used over 200 CPU-years to narrow the range of the solution to 71-73.