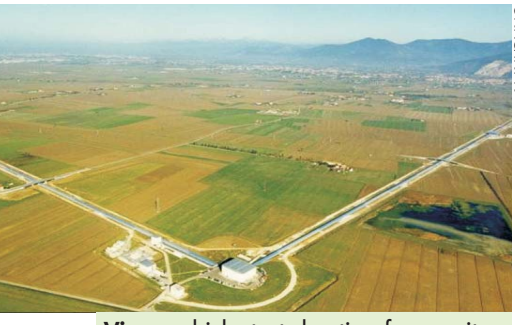
Observatories gravitate together. Two leading ground-based gravitational wave detectors announced in mid-February that they are teaming up. The Laser Interferometer Gravitational-Wave Observatory (LIGO), with one interferometer in Louisiana and two in Washington State, and Virgo, an Italian–French facility located near Pisa, Italy, will mesh their data and data analysis. Money and management will remain separate.

Combining data from the two projects—three, counting Germany and the UK's GEO600, which already has a cozy collaboration with LIGO—has several advantages, says Virgo spokesman Benoît Mours of CNRS's high-energy and astroparticle research center in Annecy, France. "We will be able to get more information from a single source, such as location, because a signal will arrive at different times at our detectors. And we increase sky coverage and can better separate signal from noise. With a weak signal, that's a real plus."



CNRS/INFN

Virgo, which starts hunting for gravitational waves next month, joins LIGO in a close alliance.

So far the hunt for gravitational waves from inspiraling compact binaries, pulsars, bursts of unknown origin, and stochastic background from the early universe has yielded only upper limits.

But that is expected to change after a nearly $200 million makeover of LIGO, to be completed in 2014, and next month's debut of Virgo, which will likewise be followed by an upgrade. The resulting higher sensitivity "is what we need to start seeing signals on a regular basis," says former LIGO spokesman Peter Saulson of Syracuse University. Publications will list as authors all 600 or so members from the allied projects. **TF**

UK bites science. After years of increases exceeding inflation and promises to protect science funding by ring fencing—shielding science funds from the rest of the government's budget—the UK government will cut 2007 science funding by £68 million ($131 million), or 1%. "The budget cut is actually a smallish blip," says Royal Society president Martin Rees. "But symbolically it concerns many people because it weakens the credibility of future assurances of 'ring fencing'."

"The fact that the ring fence has been disregarded calls into question any future promises the government might make because ministers have shown that they will happily break their promises," says Peter Cotgreave, director of the UK Campaign for Science and Engineering.

The Engineering and Physical Sciences Research Council, which funds the lion's share of physical sciences research in the UK, had its 2007–08 budget cut by nearly 3%. At press time the EPSRC was still considering what programs and grants to delay or cut.

The science cuts are the consequence of recent overspending by the Department of Trade and Industry, which funds most UK civilian science. A restructuring of the nuclear industry and the collapse of the Rover car company both siphoned DTI money. "It seems that people who have not managed their budgets well are being rewarded," says Cotgreave, "while those [in science] who have are being punished." **PKG**

Virtual geophysical data. In a modern-day twist on the International Geophysical Year of 1957 that united scientists from 67 countries in coordinated observations of the Earth, geophysicists from around the globe are declaring 2007–08 the Electronic Geophysical Year (*e*GY). Their goal is to make the massive amounts of data from Earth and space science research accessible to scientists, teachers, and others, primarily through virtual observatories.

"The cross-disciplinary aspects of data have not even been considered [by many researchers], and the cross-disciplinary part is where the cutting edge of science always has been," said W. K. Peterson, *e*GY's secretary and a plasma physicist at the University of Colorado's Laboratory for Atmospheric and Space Physics. "What we have now are a lot of FTP sites where scientists who are really in the know, who are in the club, can get at their data and share it internationally. We can do better than that."

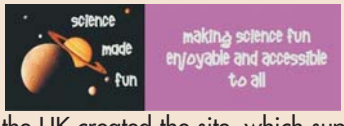
The *e*GY goals include encouraging international standards for data handling throughout the geosciences, determining who holds what data where, encouraging open access to data, and preserving older data and making it available electronically. The data will be linked through virtual observatories that are set up not just for narrow scientific disciplines, but for use by researchers from other disciplines and by nontraditional data users, such as policymakers and teachers.

The International Union of Geodesy and Geophysics initiated *e*GY, and the programs will be led by the International Association of Geomagnetism and Aeronomy. Details of events and demonstrations of virtual observatories can be found at http://www.egy.org. **JLD** ■

web watch

To suggest topics or sites for Web Watch, please visit http://www.physicstoday.org/suggestwebwatch.html. Compiled and edited by Charles Day

http://www.sciencemadefun.org.uk



Science Made Fun offers entertaining lay-language podcasts about astronomy, zoology, and other sciences. Four graduate students from the University of Manchester in the UK created the site, which supplements the podcasts with pictures, video clips, and links to additional material.

http://scirate.com

Dave Bacon, a computer scientist at the University of Washington, has devised a way to filter the torrent of preprints from arXiv and other servers. His experimental website, **Scirate**, works like flickr and other social websites. Individual users rank the preprints they come across. Scirate then gathers those rankings and lists the preprints according to their popularity.

http://www.engineeringchallenges.org

In September 2007, the National Academy of Engineering plans to announce 20 **Grand Challenges for Engineering**. To help identify those challenges, which are intended to inspire a century of research and development, NAE invites you to visit the project's website and post a comment.