Union of Concerned Scientists. "Going to more complex nuclear systems to get out of the climate change problem is not the best direction."

Citing a comment by Livermore that twice as much laser input would be needed to get 3 GW from inertial confinement fusion than from fission, Richard Garwin, a long-time adviser to presidents on nuclear weapons and energy issues, says, "I'd rather do the research for fusion than a hybrid." The hybrid, he adds, "tries to be all things to all people. I am a big supporter of breeder reactors. You are going to need repositories anyway for fission products. I believe that hybrids combine the worst of fusion and fission."

Many scientists do agree, though, that it's worth scrutinizing hybrids and debating their merits. MIT's Freidberg notes that while hybrids "were not treated too seriously within the fission community in the past," that may be changing. But, he adds, "I'm glad we don't need them urgently, because I don't think we can deliver urgently."

Toni Feder

Votano named director of underground lab

In September, Lucia Votano becomes director of Italy's Gran Sasso National Laboratory, the world's largest underground laboratory. She is the first woman to hold the post. Her predecessor, Eugenio Coccia, plans to return to research in astroparticle physics and teaching after two three-year stints at the lab's helm.

Since 1985 when Votano came to Gran Sasso, she has worked on two experiments and also served in management roles, most recently as chair of the OPERA (oscillation project with emulsion-tracking apparatus) collaboration, which studies neutrino oscillation using a beam from CERN.

One challenge facing Votano will be dealing with the aftermath of the magnitude 6.3 earthquake of last April. Gran Sasso escaped damage, but the area was hit hard, with more than half of the lab's staff rendered homeless and the nearby University of L'Aquila devastated. Those who lost their homes have been staying in nearby hotels or with relatives, and in June some moved into temporary housing on the lab's grounds. The lab is helping people find and pay for such housing and for travel to the lab. Gran Sasso also opened its doors to the university, which is hold-

ing physics classes there. "This operation to have lectures in a research center is quite rewarding," says Coccia. "More students are attending than when the lectures are at the university."

Since the area is unlikely to have recovered from the earthquake by September, Votano says, "I have to continue the effective job of the present

director." So effective, she adds, "that less than one month after the earthquake, all the experiments were fully operative."

Gran Sasso hosts more than a dozen international experiments, devoted



mainly to investigating neutrinos and dark matter. "The role of Gran Sasso in astroparticle physics is quite relevant," says Votano. "We have experiments that address the fundamental questions. My challenge will be to preserve and improve this rich legacy."

Votano took the top job because, she says, "I feel I can do something for the lab. Due to my long experience there, I feel fairly aware of the needs of the lab. I can promote physics and at the same time support the people working there."

Toni Feder

Kirby to become executive officer of APS

On 13 July, Kate Kirby, a physicist at the Smithsonian Astrophysical Observa-

tory (SAO) and a senior research fellow and lecturer in Harvard University's astronomy department, will succeed Judy Franz as executive officer of the American Physical Society. Franz is retiring after 15 years in the post.



"APS is an exciting and dynamic organization that both involves and serves the community very effectively," says Kirby. "It does a lot of wonderful things for physics and the physics community."

"I've been involved with the society for more than 25 years," she adds, "and the more I heard about [the job], the more excited I became about being part of [APS]."

Kirby is a fellow of the society; among her APS roles, she has served on the executive committee (2005–06) and as chair of the division of atomic, molecular, and optical physics (1995-98). She earned her PhD in theoretical atomic and molecular physics from the University of Chicago in 1972, and then joined Harvard as a postdoc. Shortly afterwards she was appointed to the SAO. During her tenure she served as associate director for 13 years, heading up the division of atomic and molecular physics, and led the NSF-funded institute for theoretical atomic, molecular, and optical physics.

"Dr. Kirby will bring visionary leadership and commitment to APS," says society president Cherry Murray. "She is a distinguished physicist who deeply understands the missions and operations of APS. With the scientific taste, eloquence, and diplomatic skill she has demonstrated in her career, she will be an exceptional advocate for all of physics."

Franz concurs: "Kate brings the same love of physics and strong commitment to the broad physics community that I have, and I am sure that she will use these to continue to strengthen APS and physics itself." Franz will overlap with Kirby for several weeks to smooth the transition. In recent weeks Kirby has been working closely with APS staff on the 2010 budget and preparations for the society's long-range planning meeting. During her first few weeks on the job, she plans to brainstorm with staff to see what can be done more effectively and efficiently.

Kirby's vision for the organization is to make sure it remains vibrant and responsive to the community in these "tough economic times," particularly in light of Franz's efforts to expand the society's membership. "Judy will be a tough act to follow," says Kirby. Ensuring that women and minorities are well-represented at APS meetings, on committees, as invited speakers, and as prize and fellowship recipients will be among her goals. She adds, "Mentoring might be an area that APS expands into, depending on the society's budget and the community's interest."

Policy will also be a high priority. "There is a tremendous opportunity to work with the physics community and the APS Washington office in terms of articulating the case for government investment in physics and the physical sciences," says Kirby. "There is absolutely no question that physics, basic

research, and outstanding science education are key toward securing [the US's] economic future. Physics research will play a leading role in solving top problems such as energy, nuclear security, climate change, and high medical costs. We have got to make

sure we are getting the country on the right trajectory, particularly two years from now when the stimulus funds [a \$6 billion dollar injection into science by the Obama administration] are not around."

Paul Guinnessy

news notes

Tokamak of the EAST. China's Experimental Advanced Superconducting Tokamak (see

photo below) at the Chinese Academy of Sciences' Institute of Plasma Physics in Hefei has begun producing results.

The facility's director, Jiangang Li, says that EAST was designed to explore high-performance plasmas under steady-state conditions and that it can

serve as a support facility for ITER, the international fusion reactor under construction in Cadarache, France. Like ITER, EAST uses superconducting magnets, and it can provide "important information for the ITER design, construction, and exploitation." Already, Li adds, EAST has demonstrated ways to start up the plasma and to condition the tokamak walls such that impurity release is minimized.



web watch

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http://www.physics.umd.edu/perg/fermi/fermi.htm

Enrico Fermi's ability to make quick, rough estimates has inspired the University of Maryland's Physics Education Research Group to compile a set of **Fermi Problems.** A sample question: "How many pencils would it take to draw a straight line along the entire Prime Meridian of the earth?"

http://twitter.com/AIP_Publishing

The American Institute of Physics is now using the popular short-message service **Twitter**. By following AIP's tweets, you can keep up to date on AIP's publishing and media activities.

http://www.mrs.org/s_mrs/sec.asp?CID=1803&DID=68724

From the Materials Research Society comes **Materials360 Plus**, an online source of news and information about understanding, making, and using materials, both new and old.

