

Milind Diwan (Brookhaven National Laboratory) and Kenneth Lande (University of Pennsylvania) seeks to characterize the rock structure at the 4850-foot level in preparation for excavating an enormous new cavern that would house a megaton water-Cherenkov detector for long-baseline neutrino experiments and a search for proton decay. Also at the 4850-foot level, William Roggenthen (SDSM&T), Dongming Mei (University of South Dakota), and collaborators propose to build a low-background counting facility that would be used to measure residual radioactivity in ultrapure materials intended for incorporation into sensitive experiments.

Addressing the town meeting, South Dakota Governor Mike Rounds admitted that, for a state whose population barely exceeds 700 000, the allocation of so much money before DUSEL is approved is "a calculated risk." But he spoke passionately of the educational and intellectual benefits such a world-class facility would bring to his state, which until now has had little to show its schoolchildren or offer its college graduates in the way of scientific research.

Bertram Schwarzschild

news notes

New SLAC director.

Last month Persis Drell became the new director of the Stanford Linear Accelerator Center. Since Jonathan Dorfman's retirement from that post in September, Drell had been serving as SLAC's acting director. She was a professor of physics at Cornell University for 14 years before going to SLAC in 2002 to be director of the lab's research division. As a high-energy-physics experimenter at Cornell, she had been deputy director of the university's laboratory for nuclear studies and chair of its synchrotron-radiation committee.

Her father, Stanford particle theorist Sidney Drell, served for many years as SLAC's deputy director. As the fourth director in the laboratory's illustrious 45-year history, she takes up her post at a time of transition.

For most of its history, SLAC was concerned mostly with particle physics. But now its centerpiece three-kilometer-long linear accelerator, which used to provide particle physicists with high-energy electrons and positrons, will be serving biologists and

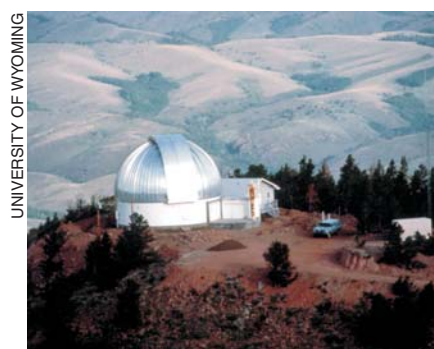
materials scientists as the injector for the world's first x-ray free-electron-laser facility.

The role of astrophysics at SLAC is also growing. The lab hosts the Kavli Institute for Particle Astrophysics and Cosmology and the team that designed and will run the soon-to-be launched GLAST gamma-ray orbiter. "My goal," says Drell, "is to position the laboratory to make a smooth transition to these exciting future programs while continuing the lab's tradition of outstanding scientific achievement."

BMS

Wyoming telescope celebrations. The University of Wyoming department of physics and astronomy hosted a free public presentation in October to celebrate the 30th anniversary of its 2.3-meter IR telescope located 25 miles southwest of Laramie on Jelm Mountain. Featured speakers included the telescope's initiators and former UW faculty Robert Gehrz and John Hackwell. Gehrz and Hackwell led a team in the mid-1970s to build what was then the largest IR telescope in the world. Housed in the Wyoming Infrared Observatory (WIRO), the telescope has been widely used to study planet formation, stars, and other astrophysical phenomena.

Coinciding with the celebrations was news that WIRO was awarded



Wyoming Infrared Observatory.

\$400 000 from NSF and \$100 000 from the university's research office to upgrade the telescope's aging electronics-control system. Increasing failures in the circuitry had led to inaccuracies in both pointing and tracking and had prompted the large-scale upgrades. "We can't wait to replace all the antiquated electronics with streamlined versions using newer technology," says WIRO director Daniel Dale. The revamped telescope will be accurate to better than 10^{-5} of a degree, "good enough to see a dime at the distance of the moon," says project designer and UW professor Henry Kobulnicky. The upgrades are scheduled to be completed by June; users outside of the Wyoming research community will have access on a competitive basis starting in 2009.

JNAM ■

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://lima.usgs.gov>

Now available online, the **Landsat Image Mosaic of Antarctica** is the result of seamlessly combining more than 1100 cloud-free satellite images of Antarctica. LIMA, which is among the first products of the current International Polar Year, is a joint effort by NSF, the US Geological Survey, NASA, and the British Antarctic Survey.

<http://www.geo.uib.no/jordskjelv>

To celebrate its centenary in 2005, the Seismological Observatory in Bergen, Norway, put on an exhibition entitled **When the Earth Quakes!** The exhibition's website, currently available in Norwegian and English, offers a detailed yet accessible introduction to seismology and its applications to understanding earthquakes and finding offshore oil.



<http://www.cap.ca/cap/art.html>

The Canadian Association of Physicists has been running its **Art of Physics** competition since 1992. Entrants have to photograph an eye-catching or unusual physics phenomenon and explain it to the general public in fewer than 200 words. The gallery of past winners is available at the competition's website.



Drell