News Notes

Future of particle physics. To solicit comments from the high-energy-physics community, NSF and the Department of Energy have posted a preliminary draft of the much anticipated report of the HEPAP (High Energy Physics Advisory Panel) subpanel on long-range planning for US high-energy physics on the Web (http://doe-hep.hep.net/news.html). HEPAP expects to submit the final document to the funding agencies early in the new year. Jonathan Bagger (Johns Hopkins) and Barry Barish (Caltech) are the cochairs of the subpanel. —BMS

Green light for Wyoming grads. Paul Johnson got word in mid-October that he could start recruiting graduate students for fall 2002, thereby ending a suspension of the only graduate physics program in Wyoming (see PHYSICS TODAY, June 1999, page 53). One condition for reinstating the University of Wyoming program was to increase undergraduate physics enrollments. From a low of about 17 four years ago, the number of declared physics majors has swelled to 50, says Johnson, the department chair.

"When prospective students visit the university, we roll out the red carpet. We give them as much time as they will give us," Johnson says. "We've had a huge success rate." A new bachelor's degree combining meteorology with physics has also proved attractive, he adds. Next in line are similar "physics plus" degrees with communications and business emphases.

Things are looking up for physics at Wyoming in other respects, too. The physics faculty, which was shrinking alarmingly in 1999, is rebounding, with two new hires this year and two more expected next fall. And the department's planetarium reopened in 2000 after floods had closed it four years earlier.

A plan is in the works to make the Wyoming Infrared Observatory financially stable, another condition for restarting the physics graduate program. Johnson expects a decision soon to either keep WIRO where it is, some 30 miles from the Laramie campus, or else move it to Pike's Peak, Colorado. Either way, the telescope will be run by a consortium, rather than having the university continue to go it alone. —TF

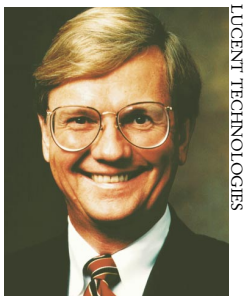
Maple-leaf math. The US and Canada, with joint government grants totaling nearly $5 million, have created an international mathematical research facility in Banff, Alberta. The Banff International Research Station for Mathematical Innovation and Discovery (BIRS) will host workshops, collaborative research efforts, and training sessions in both pure and applied mathematical sciences.

The facility is being funded for the next four years with $1.27 million from the US NSF, about $1.1 million from the Alberta Science Research Authority, and about $952 000 from the Natural Sciences and Engineering Research Council of Canada. Robert Moody of the University of Alberta has been selected as the first scientific director of BIRS.

Activities and projects at the center will be supported by Canada's Pacific Institute for the Mathematical Sciences and, in the US by the Berkeley-based Mathematical Sciences Research Institute.

"This is tangible proof of the growing importance of mathematics in all of science," said NSF Director Rita Colwell. "This will be important for the study of mathematics in cosmology, particle physics, quantum phenomena, meteorology and medicine," as well as a host of other fields, she said. —JLD

Bell Labs management. Marketing has landed on top in the latest management shuffle at Lucent Technologies. On 15 October, Bill O'Shea replaced Arun Netravali as president of Bell Labs, Lucent's R&D arm. O'Shea, who joined Bell Labs in 1972, will also continue as



LUCENT TECHNOLOGIES

O'SHEA

Web Watch

http://science.nasa.gov/headlines/y2001/ast07sep_2.htm

When you boil a liquid on Earth, thousands of small bubbles stream upward from the heated surface of the pan. In zero gravity, where there's no "up," liquids boil differently. To see how differently, visit NASA's **Bizarre Boiling** Web page, which describes a series of boiling experiments carried out on space shuttle missions.

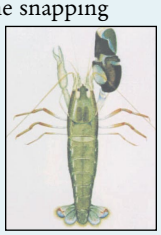
http://www.exploratorium.edu/origins/antarctica

The Exploratorium, a science museum in San Francisco, has sent a team to visit various scientific field stations on **Antarctica**. From 1 December to 12 January, you can follow the field trips online, watching the team members' progress and talking to scientists they encounter.

http://www.paci.org

PACI, which stands for Partnership for Advanced Computational Infrastructure, is an NSF program for making supercomputing resources available to the scientific community. The program's Web site describes the program, its resources, and the application process.

http://stilton.tn.utwente.nl/shrimp



When it snaps its claws, the snapping shrimp isn't trying to attract attention or mark time—it's attacking its prey. The sound wave produced by the snapping claws is so powerful that it knocks out or kills the tiny crabs on which the shrimp feeds. Detlef Lohse, Michael Versluis, and Anna von der Heydt of the University of Twente in the Netherlands and Barbara Schmitz of the Technical University of Munich in Germany have studied the snapping in detail. Last year, they reported that the blast is not produced by the snap itself, but by the violent collapse of the cavitation bubble formed by the snap. This year, the team (minus von der Heydt) discovered that the collapse generates a rapid flash of sonoluminescent light. The trio reports their finding, which they call **shrimpoluminescence**, in the 4 October issue of *Nature*. You can see a movie of the snapping claws on the University of Twente Web site.

To suggest topics or sites for Web Watch, please e-mail us at ptwww@aip.org.

Compiled by CHARLES DAY

Lucent's executive vice president for strategy and marketing.

O'Shea's appointment raised eyebrows among some current and former Bell Labs scientists. They question promoting a manager who, as they see it, shares responsibility for Lucent's recent financial fiascoes. And they worry that his appointment signals a further veering away from science (see PHYSICS TODAY, October 2001, page 26, and November 2001, page 31). Some wonder aloud whether other Bell Labs scientists in management positions will exit soon, too.

Netravali, for his part, is considering opportunities in academia and venture firms. He is also staying on as Lucent's chief scientist, a new position reporting directly to Lucent chief executive Henry Schacht.

Also on 15 October, Jeffrey Jaffe's title was ratcheted up to president of Bell Labs research and advanced technologies, just two weeks after he succeeded William Brinkman as vice president of research. —TF

Los Alamos Medal. Harold Agnew and Hans Bethe are sharing the first Los Alamos Medal, Los Alamos National Laboratory announced on 11 October. Lab director John Browne describes the medal as "the highest honor the laboratory can bestow on an individual or small group." It recognizes contributions to science and to LANL, but is not limited to lab alumni. The medal carries no cash award.

LANL salutes Agnew for his "leadership during the laboratory's formative years and [its] ascension to international stature." Agnew joined the lab in 1943 and, in the capacity of a scientific adviser, witnessed the dropping of the atomic bomb on Hiroshima. Later, he was a New Mexico state senator and then a science adviser to NATO. He returned to LANL in 1964 and from 1970 to 1979 served as its third director. Agnew headed General Atomics in San Diego, California, until he retired in 1984.

Bethe is cited for his role as a "scientific visionary and leader, mentor and role model to the laboratory from its inception." Bethe headed LANL's theoretical group from 1943 to 1946. Since World War II, he has been consistently outspoken against the use of nuclear weapons. He is now an emeritus physics professor at Cornell University.

LANL plans to solicit nominations for the medal annually, though it may not always name a winner. —TF ■