

the minister to change his mind. But French scientists haven't given up hope for Soleil. Says LURE director Robert Comes, "Allègre is not eternal. If we have to wait until he leaves, we will wait." To counter delays, Comes says France may start building instruments intended for use on Soleil that, in the meantime, could be used either at LURE or other facilities. The best compromise now, he says, "would be to build Diamond and Soleil—both as international facilities."

TONI FEDER

UMinn Faculty Teach Each Other Science

The University of Minnesota's Twin Cities campus is trying to get its physical and life sciences faculty members talking, and working, together. New programs at the university, says biophysicist Victor Bloomfield, "are in the broader context of mathematicians and physicists making a serious effort to learn something about modern biology."

For example, in a seminar series launched this past fall, physical scientists, engineers, and biologists are discussing their current research; the topics touched on so far include mathematical models of bacterial chemotaxis, microbial growth, and metabolic pathways. Hosted jointly by several departments, the seminars are presented by both in-house and visiting scientists, and are intended to stimulate new collaborations. An earlier seminar series that focused specifically on math and physiology, "led us to believe that there is a great deal of interest on both sides to pursue this," says UMinn physiologist Robert Miller. "We discovered that many times when biologists would present material, mathematicians didn't have enough background to know where it was going. We want to try to get to a level where people can talk about research at the cutting edge."

This March, Miller and others will be offering a weeklong intensive course in molecular biology and neuroscience—"areas where we felt physicists and engineers would benefit most from the exposure," Miller says.

There's "a scientific and cultural need-to-know," says biologist Harvey Lodish, who organized a similar course at MIT a few years ago. "There was a period when engineering undergraduates were conversant in biology—but their professors were not." Many of the participants were already working in cross-disciplinary

areas, Lodish says. "They were doing tissue engineering without knowing molecular biology. It was a crash course to get them up to speed." Ever since, he adds, biologists at MIT have been "pestering the engineering school to offer us such a course—to teach us about imaging, microfabrication, silicon wafers, DNA chips."

UMinn's new faculty-to-faculty cross-disciplinary seminar series and intensive course are both being funded largely through the graduate school with \$10 000 from the McKnight Foundation. "The university is putting a special emphasis on enhancing the growth of the life sciences, and there are new sources of funding for bioengineering research," notes Miller. Among other efforts to boost interdisciplinary science at UMinn is a PhD degree program in computational neuroscience launched last year; a new graduate minor in bioinformatics is also in the works. Says Miller, "Biological sciences will be a dominant theme for the next century. We have to make sure that people know enough. This effort is both educational, and to open dialogue."

TONI FEDER

Chiaverina and Hubisz Join AAPT Presidential Line

At the winter meeting of the American Association of Physics Teachers, Chris Chiaverina, a physics teacher at New Trier Township High School in Winnetka, Illinois, will become the association's vice president. AAPT will also get a new president-elect, John Hubisz of North Carolina State University. Ruth Howes of Ball State University is AAPT's president for 2000; she assumed the position following the untimely death last April of the association's president-elect, Robert Sears Jr (see his obituary in the October issue, page 106).

Hubisz, who holds a PhD in physics and space science from York University, has been a physics professor at North Carolina State since 1993. Prior to that, he was a professor at College of the Mainland in Texas City, Texas, for 22 years, and from 1955 to 1971, he was at Francis Xavier University. A long-time member of AAPT, he has served on and chaired numerous committees within the association, including the pre-high school committee (which he helped found) and the committee on physics in two-year colleges. Hubisz, who is also an ordained minister, received an award

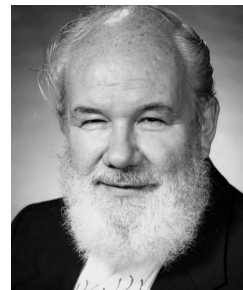
last year from the Templeton Foundation for a science and religion course that he created.

Chiaverina, the new vice president, holds an MS in physics education from Northern Illinois University. He has been teaching high school since 1968 and has received a number of teaching awards. He has also been active in organizing amusement park physics programs and other projects designed to make physics more accessible to a broad audience.

In other results of the AAPT elections, Alexander Dickison of Seminole Community College was reelected treasurer, and Carolyn Haas of Salem Community College was elected member-at-large for two-year colleges.



CHIAVERINA



HUBISZ

Sartwell Is AVS President-Elect for 2000

Members of the American Vacuum Society recently elected Bruce Sartwell to be their next president-elect. Sartwell, who took office on 1 January, succeeded Paula J. Grunthaner, AVS's president for 2000.

A research physicist at the Naval Research Laboratory in Washington, DC, Sartwell holds an MS in materials engineering from the University of Maryland, College Park. From 1973 to 1982, he worked at the Bureau of Mines' metallurgy research center in College Park. He then joined NRL's condensed matter division, where he conducted studies on the effects of energetic ions on the growth of thin films. In 1994, he transferred to the lab's chemistry division. Sartwell currently manages several Department of Defense programs, including one to replace chrome plating with thermal spray coatings on military aircraft components, another to set up a production-scale system for treating hazardous wastes using plasma arc technology, and a third to demonstrate improved material performance using ion implantation.

In addition to Sartwell, AVS members reelected Joseph Greene (Uni-

versity of Illinois at Urbana-Champaign and Linköping University in Sweden) as AVS clerk, and John



SARTWELL

Coburn (University of California, Berkeley) as treasurer. The newly elected directors are Calvin Gabriel (VLSI Technology Inc), Howard Patton (Lawrence Livermore National Laboratory), and Dorota Temple (MCNC), and the new trustees are

Ellen Stechel (Ford Motor Co) and William Westwood (a consultant in Ottawa, Ontario).

IN BRIEF

Fusion energy research. The Joint European Torus, the record-setting magnetic fusion experiment and the only one where trials with tritium can be performed, will stay open for at least three more years. A lawsuit over salary disparities that had threatened to close JET has been settled, with about \$24 million to be distributed to around 200 British employees at the Culham, England, tokamak (see PHYSICS TODAY, July 1999, page 45). In addition, the United Kingdom Atomic Energy Authority is slated to take over management of

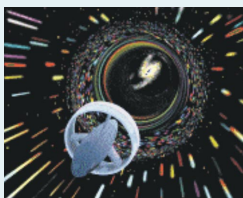
the facility on 1 January from the JET Joint Undertaking, which had run it for the European Commission since 1978, and to manage it jointly with Europe's 15 other fusion associations. Future research at JET will focus on eventual fusion energy production in preparation for the planned next-step machine, the International Thermonuclear Experimental Reactor.

Cross-disciplinary grants. Proposals are being solicited for programs to train graduate students and postdocs from the physical, chemical, and computational sciences to work in the biological sciences. Continuing an initiative it began in 1996, the Burroughs Wellcome Fund plans to award up to a total of \$10 million over five years to several universities or consortia of research institutes and universities in the US and Canada, with the goal of "training investigators coming from quantitative and theoretical backgrounds so they can introduce new approaches and new ideas into the biological arena." For more information, including how to apply, see http://www.bwffund.org/interfaces_program.htm; write to Burroughs Wellcome Fund, Interfaces Program, 21 T. W. Alexander Drive, PO Box 13901, Research Triangle Park, NC 27709; send e-mail to info@bwffund.org; or call Debi Linkous at 919-991-5116. The deadline for submitting proposals is 10 April. ■

Web Watch

<http://www.lerc.nasa.gov/WWW/PAO/warp.htm>

Warp Drive When? is the catchy title of a Web site that explains NASA's Breakthrough Propulsion Physics program to the general public. Managed by Marc Millis of NASA's Glenn Research Center (who also created the Web site), the program seeks the ultimate breakthroughs in space transportation. The use of "ultimate" reflects the fact that, according to Millis, convenient interstellar travel will require such feats as achieving superluminal velocities and controlling gravity.



<http://www.whalelink.org/orcafm.html>

Thanks to the Vancouver Aquarium's Marine Science Centre, you can use your Web browser to listen to the live sounds made by killer whales off the coast of British Columbia. As described by the facility's ORCA FM Web site, researchers use a network of underwater microphones to identify and study individual whales and their kin groups.



<http://www.nmsi.ac.uk/on-line/fusion>

Fusion is an on-line exhibition offered by the UK's Science Museum. Aimed at a general audience, it describes the principles, and history of fusion physics, as well as the hopes for fusion-generated electric power.



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

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