

mittee may have left a somewhat different impression in its report.

SSC vs LHC. The Rubbia committee's report often adopts a rather Euro-nationalist tone, and it is perhaps not quite right to say, as Rubbia suggested, that the Abragam committee simply made a carbon copy of its central scientific recommendations. This is what the Abragam report says:

"It is... reasonable to propose to American physicists, as the CERN

management has done, to take advantage of the existing infrastructure at CERN in taking part in the construction of the LHC. The considerable financial advantages of such a solution should encourage the American government and American physicists to give it serious consideration, especially if it receives early signs of approval by the CERN member states and if, in return, CERN were prepared to consider contributing to the construction of a

linear collider of very high energies in the United States when the time comes. If, however, the American government decides to finance and build the SSC relatively quickly (with commissioning before the end of the century), it would probably be wiser to drop the LHC and concentrate efforts on development of the necessary technologies for CLIC [the CERN Linear Electron Collider], the physics potential of which is complementary." —WILLIAM SWEET

Romanians outdo US and Soviets in physics olympiad

She may not be as famous as Nadia Comaneci and she may not be a star athlete, but she is a star, she's Romanian and she happens to be the first woman ever to win a major medal in the International Physics Olympiad. One of 125 contestants from 25 countries in the 18th Physics Olympiad, which took place this year in Jena, East Germany, during the first two weeks of July, Didina Serban was the winner of one of ten silver medals, helping lead the Romanian team to a remarkable come-from-behind victory. Romanian contestants C. Maluranu and C. Necula won two of the three gold medals. The third gold medal went to a contestant from the Netherlands, B. V. de Bakker.

Started in 1967, the Physics Olympiad originally was an Eastern European event, but a large number of non-Communist countries now participate (see *PHYSICS TODAY*, September 1986, page 51). The United States sent a team last year for the first time. This year, for the second year in a row, the American team won three bronze medals. The Soviet team won a silver, two bronzes and two honorable mentions. The team from Canada won a bronze and two honorable mentions.

This year's US contestants were Bryan Beatty of Greer, South Carolina; Golda Bernstein of Tucson, Arizona (alternate); Franklin Ming Chen of Ann Arbor, Michigan; Eli Glezer of San Diego, California; Normand Modine of Oak Ridge, Tennessee; and Steven Worley of Reading, Massachusetts. Beatty, Glezer and Modine won the bronzes, Chen an honorable mention.

Glezer's performance at the olympiad was notable in that he gave a unique and unexpected answer to one of the questions on the theory exam, which led to a prolonged argument between the American coaches and the judges, a group of East German physicists described as first-rate by the American participants. The argument was resolved when one of the Russian coaches, Sergei Krotov of Moscow State University, intervened with an obser-



US contestants in the 1987 Physics Olympiad posed for this photograph in Jena, East Germany, with their trainers Jack Wilson, executive officer of the American Association of Physics Teachers, and Arthur Eisenkraft, a high-school physics teacher from Bedford, New York. From the left are Eisenkraft, Wilson, Eli Glezer, Franklin Ming Chen, Steven Worley, Normand Modine and Bryan Beatty.

vation to the judges that Glezer's solution was in fact superior to theirs.

Jack Wilson, executive officer of the American Association of Physics Teachers, and Arthur Eisenkraft, a high-school physics teacher from Bedford, New York, who together ran the training sessions for the olympiad, feel that the mood of this year's olympiad was quite extraordinary: "A spirit of 'glasnost' was clearly evident," they wrote in a report about the event. "The Soviet and US students and leaders spent many hours socializing, visiting and talking physics. Every time we visited the students' rooms we found several Soviet students there. The level of interaction was unprecedented. It was also clear that East Germany was making a major effort to reach out to the Western nations present. Organization of the olympiad was superb and involved over 400 individuals, many of them physicists from Carl Zeiss—Jena and the Friedrich Schiller University in Jena. . . . We were treat-

ed as honored guests and did not have to suffer the bureaucratic indignities we might have expected—even at border crossings."

—WILLIAM SWEET

Ward is president-elect of Acoustical Society of America

W. Dixon Ward is the president-elect and Eric E. Ungar is the vice president-elect of the Acoustical Society of America. They will succeed the current officers in 1988. Chester M. McKinney is the current president and Herman Medwin is vice president.

Ward, a specialist in psychoacoustics, received his PhD in experimental psychology from Harvard in 1953. He worked as a research engineer at Baldwin Piano in 1953–54 and as a research scientist at Central Institute for the Deaf in 1954–57. From 1957 to 1962 he was a research associate with the Committee on Conservation of Hearing



WARD

of the American Academy of Ophthalmology and Otolaryngology. He has been a professor of otolaryngology, communication disorders, environmental health and psychology at the University of Minnesota since 1962. He was ASA vice president in 1986-87 and vice president-elect in 1985-86.

Ward has been concerned all his life with noise-induced hearing loss and its prediction. His laboratory and fieldwork have had practical applications in industrial health and safety. He has also conducted research on musical perception.

Ungar received his EngScD in mechanical engineering from New York University in 1957, after serving as an aero-ordnance engineer with the Sandia Corporation from 1951 to 1953. From 1954 to 1958, he lectured and conducted research at New York University. In 1958 he joined Bolt Beranek and Newman Inc, where he held several positions, including principal engineer (1977-83), and where he is now chief consulting engineer. For ASA he has served as chairman of the shock and vibration committee (1975-79), associate editor of the *Journal of the Acoustical Society of America*, executive councilor and participant in several other committees.

Ungar's research and consulting at BBN have centered on the vibration of complex structures and machines, particularly those employed in the construction of high-technology devices.

Jont B. Allen and Richard Stern are new members of the ASA executive council. Allen, a supervisor at AT&T Bell Laboratories, Murray Hill, received a PhD in electrical engineering at the University of Pennsylvania in 1971. Stern, associate director of research at Pennsylvania State University's Applied Research Laboratory, earned his PhD in physics at the

University of California, Los Angeles, in 1964.

Survey of physics bachelors finds that more plan to teach

The latest AIP survey of bachelor's degree recipients reveals significant shifts in the employment distribution of new graduates, especially between the industrial and military sectors, a substantial increase in the number of graduates choosing to go into teaching, and a significant increase in the number of blacks who reported earning bachelor's degrees in physics.

Of the 5214 recipients of bachelor's degrees in physics in the class of 1986, 2784 responded to the survey. Of these respondents, 49% opted for immediate employment after their undergraduate studies. Only 28% of those surveyed planned to enroll in physics graduate programs. This percentage is the lowest in the last decade and reflects a gradual but continuous increase in the number of employment-oriented graduates.

Of the 825 students who accepted full-time employment immediately after terminating their studies, 28% chose jobs with the military, an increase of 5 percentage points from last year. The percentage of new graduates joining industry dropped to 48% from 55%. Of those who went to work for the government, more than three-quarters of the men went to work for the military and more than three-quarters of the women for civilian branches.

Approximately 100 of the 1986 respondents joined high-school teaching staffs. This is almost double the number of students who reported going into teaching the year before, a fact that should be of some comfort to those concerned with the shortage of high-school science instructors. In 1981, only 23 graduates said they had taken entry-level teaching jobs.

Although the demand for physics bachelors remained high this year, the median salary for graduates fell 4.5% in 1986, to \$1900 per month. The median monthly salary for women, however, rose to \$2160 per month, \$300 higher than the median salary for men, which dropped 5% to \$1860. The decline in male emoluments is connected to the decrease in the proportion of bachelors taking industry positions and the increase in the proportion taking military jobs, which pay less: The shift from industry to the military was especially marked among men.

A record 51 black students reported receiving physics bachelor's degrees. The number compares favorably with the analogous figure of 42 reported in

1985, but the increase may be a spurious result of a greater response rate from minority students.

Of the bachelors who planned to enroll in graduate physics programs in the fall, 17% responded that physics was not offered at their high school or that they had not studied it there. This percentage almost triples the 6% figure reported in 1976 and is up 2 percentage points from last year.

The class of 1986 contained 169 astronomy bachelors. Forty percent of these planned to enroll in graduate astronomy programs, a 14% increase from the previous year and the highest percentage recorded in the last decade. This trend is the reverse of the one witnessed among physics bachelors. In the past two decades the percentage of physics bachelors who have continued with graduate work in physics has fallen from 55% to almost 30%.

The 1985-86 *Survey of Physics and Astronomy Bachelor's Degree Recipients* is available from Susanne D. Ellis, Education and Employment Statistics Division, American Institute of Physics, 335 East 45th Street, New York NY 10017.

in brief

A directory of science training programs for exceptionally able pre-college students this summer and during the 1987-88 academic year has been published. The programs generally involve special courses or research at colleges, universities or laboratories. For a copy of the 1987 *Directory of Science Training Programs for High Ability Pre-College Students*, send \$1 to Directory, Science Service, 1719 N Street NW, Washington DC 20036.

IEEE's Technical Committee for Computer Applications in Nuclear and Plasma Sciences has established a new award, consisting of \$1000 and a plaque, for "outstanding contributions to the profession of using computers in nuclear and/or plasma scientific research." Further information can be obtained from Lester Welch, Argonne National Laboratory, Argonne IL 60439-4843.

Cornell University has acquired the earliest known letters of André Marie Ampère, the self-taught French physicist known primarily for his contributions to electrodynamics. Cornell historian L. Pearce Williams, who is writing a biography of Ampère, learned during a visit to Paris of the 250 pages of letters, which had just been discovered in the barn of a château. Cornell paid \$30 000 for the collection. □