### the physics community

# AAS survey shows astronomy job pinch

Astronomy appears not to have been having employment problems as serious as those physics has been experiencing, but evidence has been accumulating that astronomy too is beginning to feel the pinch. A survey of the employment situation in astronomy shows that about 5% of recent graduates are known to be having trouble finding jobs in a field that, until recently, could find positions for virtually all of its members.

The survey was conducted by the American Astronomical Society's Committee on Manpower and Employment, headed by Donald W. Goldsmith, and it covered 44 of the approximately 50 departments of astronomy in the US that grant PhD's in astronomy and astrophysics. The committee found that between September 1969 and September 1972 the responding departments granted 361 PhD degrees in astronomy and astrophysics, and estimates were made that about 140 doctoral degrees per year would be given in 1973 and 1974. The survey also showed that there are presently 392 full-time astronomy faculty positions and 194 nonfaculty positions, which includes postdocs, research associates and so on. The committee predicts that the number of faculty positions will increase by at most 12 over the next few years and that the nonfaculty positions will remain approximately constant in num-

Of the 361 recent graduates, 18 were reported as having serious problems finding jobs in astronomy, and 19 of those currently in nonfaculty positions are having similar difficulties. There are about 840 graduate students in astronomy in the responding departments and about half of these are expected to receive doctorates ultimately. Goldsmith pointed out that the ratio of people without jobs to people with jobs is higher among postdocs than among recent graduates, indicating that it is relatively easy to find a postdoc position, but harder to find a permanent job. Echoing many of the points made by Bart J. Bok, AAS president, in his State of Astronomy Address, Goldsmith noted that astronomy is now faced with the same cutback in funding and other support that hit physics in the late 1960's. He said that although public and governmental support for astronomy had continued into the 1970's, it now appears that astronomy will have to tighten its belt for the foreseeable future. He also noted that the physics employment crunch, although it has softened somewhat, is affecting astronomy because numbers of physicists are moving into astronomy and displacing astronomers, and he said that eventually the laws of the marketplace would necessarily even out employment in both fields. Goldsmith urges that greater attention be given to the possibility of half-time faculty appointments so that scientists who are willing to work at a lower salary could continue their research.

# Wisconsin physicist wins AAPT competition

The winners of the American Association of Physics Teachers Apparatus Competition were presented awards at AAPT's annual January meeting in New York. The \$400 first prize went to Ronald Bergsten, of the University of Wisconsin, Whitewater, for "Optical Crystals." The \$300 second prize was presented to Alex F. Burr, of New Mexico State University, for "Demonstration of the Non-Colinearity of the Angular Velocity Vector and the Angular Momentum Vector." Third prize, consisting of \$200, went to Oleg Jefimenko, of West Virginia University, for "Water Stream 'loop-the-loop.' Fritjof E. Christensen, of St Olaf College, Carleton, Minnesota, was the director of this seventh biennial competi-

# Kraft becomes AAS president-elect

Robert P. Kraft, Acting Director of the Lick Observatory, has been elected president-elect of the American Astronomical Society. He will take office in July and serve for one year after which he will be president of the Society for two years. Bart J. Bok of the Steward Observatory, University of Arizona, is the current president. Kraft is a professor of astronomy and astrophysics at the University of California at Santa Cruz and he specializes in studies of galactic x-ray sources, metal abundances in old stars and matter ejected from the nuclei of certain galaxies. He received his PhD from Berkelev in 1955 and has been at Santa Cruz since 1967.

In the same election, Victor M. Blanco, Director of the Cerro Tololo Observatory in Chile, was elected one of the two vice-presidents of the AAS. The other vice-president is E. Margaret Burbidge, who was elected last year. Blanco will serve a two-year term as vice-president.

Others elected by the AAS member-



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ship are Halton C. Arp of Hale Observatories, George B. Field and Owen J. Gingerich of Harvard and the Smithsonian Astrophysical Observatory, who were named Councilors. Benjamin F. Peery, University of Indiana, and William A. Hiltner, University of Michigan, were elected as representatives to the IAU in categories I and II respectively. Roberta M. Humphreys of the University of Minnesota and Vera C. Rubin of the Carnegie Institution were elected to the AAS nominating committee.

#### in brief

The Information Pool in Education and the Consultants Program, administered by the AIP Education Division, have received grant extensions from the NSF that will enable them to continue operation through June 1974. The Information Pool provides documents and reports on physics education, and the Consultants Program arranges visits by experts to institutions making major changes in their physics programs.

The Society for Industrial and Applied Mathematics has established an Institute for Mathematics and Society to encourage the application, of mathematics to the major problems of society. President and executive director of the Institute is Donald L. Thomsen Jr, former president and chairman of the Board of Trustees of SIAM. For further information write SIAM, 33 South 17th St, Philadelphia, Pa. 19103.