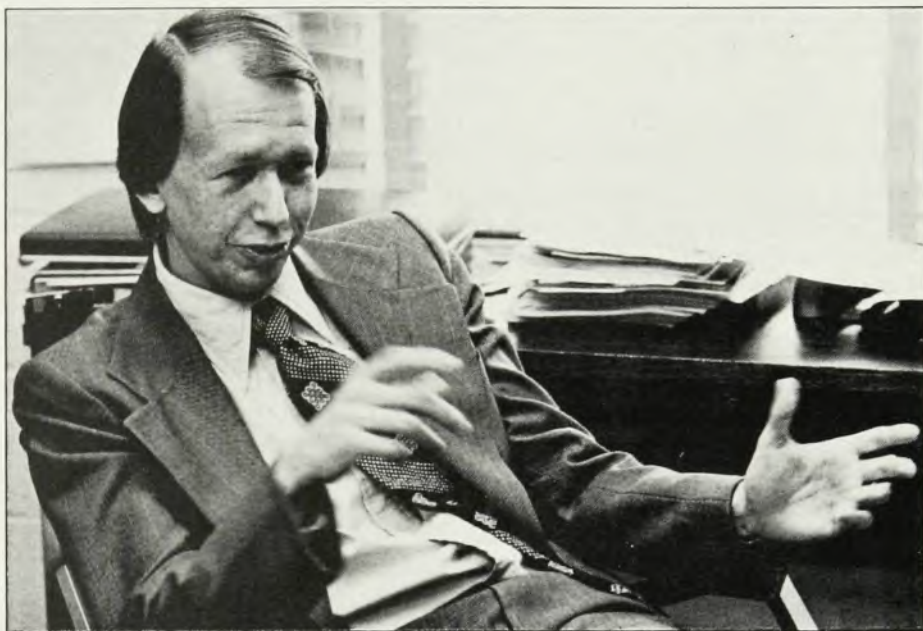


AAS awards Warner prize to Arthur Davidsen

The 1979 Helen B. Warner Prize for Astronomy has been awarded to Arthur Davidsen, associate professor of physics at The Johns Hopkins University. Presented annually by the American Astronomical Society, the \$1000 prize recognizes significant contributions to astronomy during the five years preceding the award. The recipient must be under 36 years of age and a resident of North America.

The awards committee cited Davidsen's work in high-energy astrophysics and singled out his development and successful flight of a rocket-borne, ultraviolet radiotelescope with which he measured the Lyman-alpha emission line of hydrogen in quasar 3C 273. The experiment supported the view that quasars are located at cosmologically vast distances from Earth. In addition, the results revealed that there is too little neutral hydrogen in space to provide sufficient gravity to slow the expansion of the universe.

Davidsen received his bachelor's degree from Princeton University in 1966. From 1970 to 1971, he was Scientific Liaison Officer for x-ray astronomy at the Naval Research Laboratory in Washington, D.C. Davidsen then went to the University of



DAVIDSEN

California at Berkeley where he obtained a master's degree in 1972 and a doctoral degree in 1975. After joining the Johns Hopkins faculty in 1975, he consulted in x-ray astronomy for the Naval Research Laboratory for a year. The astrophysicist's present projects include the re-

launching of the ultraviolet telescope to study an x-ray pulsar, the development of a similar, but larger telescope and the design of the faint-object spectrograph for the NASA Space Telescope.

Müller-Krumbhaar wins Schottky solid-state prize

Heiner Müller-Krumbhaar received the 1979 Walter Schottky Prize for Solid-State Physics at the German Physical Society's spring meeting in Münster. Müller-Krumbhaar, a professor at the University of Hannover Institute for Theoretical Physics, was honored for his work on the theory of crystal structure. His theory makes detailed predictions possible about the surface structure and growth rates of crystals. It also describes the space-time behavior of crystalline forms above the so-called "roughening temperature" as well as the development of surface spirals. He conducted part of this work with colleagues at the Institute for Solid-State Research at the Nuclear Research Facility at Jülich. Müller-

Krumbhaar developed another dynamic stability theory with James S. Langer (Carnegie-Mellon University, Pittsburgh, Pennsylvania) that for the first time gives an explanation for the development of dendritic ("tree-like") crystals such as snowflakes.

National Academy elects members and associates

Sixty new members and 15 foreign associates were elected to the National Academy of Sciences last April.

Physicists and scientists in physics-related areas include:

Harold M. Agnew, president of the General Atomic Corporation, San Diego, California; Keiiti Aki, professor of geophysics at MIT; Valentine Bargmann,

professor of mathematics and physics at Princeton University; Elias Burstein, professor of physics at the University of Pennsylvania; Ernest M. Henley, professor of physics at the University of Washington; Ira J. Hirsh, professor of psychology and director of research for the Central Institute for the Deaf, Washington University; Thomas S. Kuhn, M. Taylor Pyne professor of the history of science at Princeton University; Paul C. Martin, professor of physics at Harvard University; Gordon H. Pettengill, professor of planetary physics at MIT; Norman C. Rasmussen, professor and head of the department of nuclear engineering at MIT; Alfred G. Redfield, professor of physics and biochemistry at Brandeis University; John H. Sinfelt, scientific advisor for the Corporate Research Laboratories, Exxon Research and Engi-