James A. Van Allen was born in Mt. Pleasant, Iowa. Following his early education in the public schools there, he attended Iowa Wesleyan College and received a B.S. degree in physics in 1935. His graduate study was at the University of Iowa, with an M.S. degree in 1938 and a Ph.D. degree in nuclear physics in 1939. Subsequent professional experience included research at the Carnegie Institution of Washington and the Applied Physics Laboratory of Johns Hopkins University as well as World War II service as a naval officer in the Pacific Fleet. In 1951, he returned to the University of Iowa as a professor of physics and head of the Department of Physics (after 1959 the Department of Physics and Astronomy). He has been a pioneer in space exploration including discovery of the radiation belts of the Earth in 1958 and the first missions to the planets Venus, Mars, Jupiter, and Saturn. He has authored 246 research papers and two books on planetary magnetospheres, cosmic rays, solar energetic particles, and solar X-rays and has directed 34 Ph.D. dissertations and 45 M.S. theses in these fields. He received a National Medal of Science from President Reagan in 1987, the Gold Medal of the (U.K.) Royal Astronomical Society in 1978, the Crawford Prize of the Royal Swedish Academy of Sciences from King Carl XVI Gustaf in Stockholm in 1989, the Nansen Medal and Prize from the Norwegian Academy of Science and Letters in Oslo in 1990, and the 1991 Vannevar Bush Award of the National Science Board. He and his wife, the former Abigail Fisher Halverson, have three daughters and two sons.
Program

Final/Drift
From Anders Hultqvist's *Music for James Van Allen*, 1989

Karen Bergquist, flute
Marla Feeney, clarinet
Brian McLaughlin, horn

Wonran Kim, violin
Michele Meininger, viola
Margot Bennett, violoncello

Center for New Music

Introduction
Hunter R. Rawlings III

The Modern Saga of Planetary Exploration
James A. Van Allen

Reception immediately following

Music for James Van Allen, by Anders Hultqvist, a member of the faculty of music at the University of Goteborg, was commissioned by the Royal Swedish Academy of Sciences for the Crafoord Prize ceremony in Stockholm in 1989. This is the first performance outside Sweden.

The ensemble of graduate students from the Center for New Music, University of Iowa School of Music, was organized especially for today's program by Professors David K. Gornig, musical director, and D. Martin Jenni, director.

At the reception in the lobby immediately following the lecture, Wolfram Niessen, a sculptor from Wheeler, Wisconsin, will unveil a new piece, a bronze bust created in honor of Professor Van Allen.