

Inertial confinement researcher wins Maxwell Prize

John H. Nuckolls, a leading scientist in the laser fusion and weapons programs of Lawrence Livermore National Laboratory, has been honored with the 1981 James Clerk Maxwell Prize by the American Physical Society.

The prize is named in memory of James Clerk Maxwell, the nineteenth century Scottish physicist whose work on electromagnetic field theory laid the foundation for future research. It is given in recognition of "outstanding contributions to the advancement and diffusion of the knowledge of properties of highly ionized gases of natural and laboratory origin." Presented annually at the meeting of the Plasma Physics Division of the APS, the award consists of four thousand dollars and a certificate and is sponsored by Maxwell Laboratories, Inc. of San Diego, California.

Nuckolls is the first recipient of the Maxwell Prize whose research is on inertial confinement fusion; the six previous winners worked with magnetic confinement. He is cited "for his contributions to the genesis and progress of inertial confinement fusion. His insight into the fundamental physics issues has served to guide and inspire the

technical evolution of the field."

After obtaining his BS from Wheaton College in 1953 and an MA in physics from Columbia University in 1955, Nuckolls joined the staff at Lawrence Livermore National Laboratory as part of the weapons program. His research there has included work on thermonuclear explosions, underground nuclear explosions and laser fusion.

Nuckolls was on the team that suggested various methods of imploding pellets to release fusion energy; he collaborated with physicist Lowell Wood to produce new computer calculations suggesting that shaped laser pulses could be ignited with less energy than had been predicted; and he was one of the original proponents of using laser fusion in power plants and spaceships. In 1975 Nuckolls was named the associate program leader for target design of the Laser Fusion Program at Lawrence Livermore Labs, and in 1980, he became the division leader of the Nuclear Design Program. This division has made many important contributions to the field, including the invention of fuel pellets which are adapted to a variety of ICF drivers.



NUCKOLLS

Albert A. Bartlett selected to be Millikan Award winner

The 1981 Robert A. Millikan Award of the American Association of Physics Teachers has been presented to Albert A. Bartlett, a professor at the University of Colorado in Boulder.

The winner of this prize is selected annually "for notable and creative contributions to the teaching of physics" and is honored at the summer AAPT meeting. The award is supported by a yearly gift from Prentice-Hall, Inc. and includes a medal, \$300 and a citation.

At the presentation ceremony, Bartlett gave his Millikan Memorial Lecture entitled "Are We Overlooking Something?" He called for a reexamination of the content of first-year introductory courses for scientists and engineers and suggested that an increased emphasis on traditional topics

and applied physics might give students a greater appreciation of the importance of physics to understanding real-world problems.

Bartlett received his BA from Colgate University in 1944, his MA from Harvard in 1948 and his PhD in physics from Harvard in 1951. He was a member of the staff of Los Alamos Science Lab from 1944 to 1946 and taught at Harvard from 1950 to 1962, when he became a professor at the University of Colorado.

Navy honors physicist with civil service award

The Naval Research Laboratory recently presented the Navy Superior Civilian Service Award to Bruce J. Faraday in recognition of his performance, from 1974 to 1980, as head of



BARTLETT