terested in the application of electronic computers to problems in astrophysics, helped found the Research Computing Center at Indiana University in 1955 and served as its first director for three years. During 1958–59 he was a National Science Foundation senior postdoctoral fellow at the Max Planck In-

stitute for Physics and Astrophysics.

Wrubel wrote A Primer for Digital Computers, an important early work in the computing field, and contributed numerous papers on stellar atmospheres, stellar interiors and hydromagnetics to scientific journals.

Active in professional organizations, he served as a councillor of the American Astronomical Society and on the editorial boards of the Astrophysical Journal and Journal of Computational Physics. He was a member and past officer of two commissions of the International Astronomical Union. Wrubel was also a member of the NSF astronomy panel for three years and its chairman the last year.

Hollis R. Johnson Indiana University



distinguished visiting professor at the University of Utah. He is currently Einstein Professor and director of the Institute for Theoretical Physics and the Company of the Institute for Theoretical Physics and the Institute for Theoretical

Chen Ning Yang

has been appointed

YANG cal Physics at the State University of New York at Stony Brook. Yang received the Nobel Prize in 1957 jointly with T. D. Lee for their research into the laws of par-

Appointed director of the process and material research laboratory at RCA Laboratories is Paul Rappaport.

Newly elected vice-president of the American Astronomical Society is W. W. Morgan; elected as councilors are Geoffrey Burbidge, George Wallerstein and Lodewyk Woltjer.

G. King Walters, professor of physics and space science at Rice University, was named to the new position of associate dean of engineering and science.

At a party celebrating his 61st birthday, Josef Meixner, a professor at the Technical University in Aachen, Germany, was awarded an honorary degree by the mathematics and natural sciences faculty of the University of Cologne for his research work in theoretical physics and thermodynamics of irreversible processes.

Robert A. Young has become treasurer of the American Crystallographic Association succeeding Robinson D. Burbank.

Brooklyn College of the City University of New York has appointed Vincent deLany and Louis Celenza assistant professors.

The Fiber Society has elected as president George M. Bryant, assistant director of the research and development department of Union Carbide Corp.

John M. Kelso is vice-president and director of research of ITT Electro-Physics Laboratories.

The University of Massachusetts at Boston has appointed **D. Rao**, formerly of Master Optics and Harvard, as associate professor. **Leonard Catz** of MIT and **John Shane** of Sperry Rand Research have been appointed assistant professors.

Eric A. Sheldon, of the Swiss Federal Institute of Technology, has joined the University of Virginia as visiting professor for the academic year.

Elected president of the Association of Universities for Research in Astronomy is W. Albert Hiltner, professor of astrophysics at the University of Chicago. He replaces Rupert Wild of Yale.

Gilbert N. Plass, formerly with the Southwest Center for Advanced Studies, was named head of the physics department at Texas A&M University. Named associate professor is George W. Kattawar and as assistant professors, John C. Hill, Jurgen K. Kubler and Bryan H. Wildenthal.

Joining Florida Atlantic University College of Science as a visiting professor is R. K. Asundi.

Jack A. Soules has joined Cleveland State University as dean of the College of Arts and Science. Appointed associate professor is Herbert Schlosser, formerly at Brooklyn Polytechnical Institute, and assistant professor is Ronald M. Haybron, of Oak Ridge National Laboratory. Michael S. Moore, Robert J. Liefeld and George A. Keyworth have joined Los Alamos Scientific Laboratory to work in the physics division. Other divisional appointments include John J. Busick and Robert L. Burman in medium-energy physics; Charles E. Morris in explosives testing; Robert H. Gattis and Robert P. Godwin in weapons; Donald A. Neeper and Harold H. Rogers in theoretical; and Arthur M. Boring in chemistry and metallurgy.

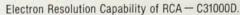
William N. Ellis has joined the Science Policy Division of the United Nations Scientific, Educational and Cultural Organization (UNESCO). Ellis was for

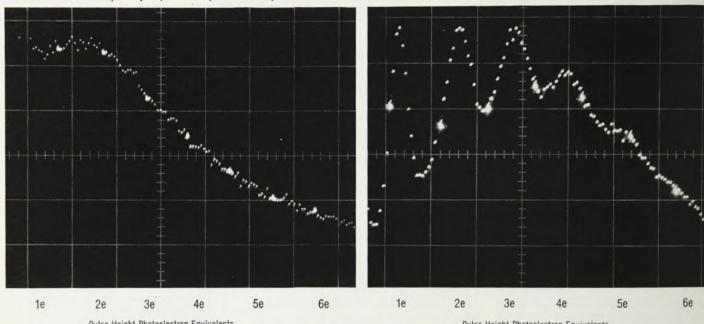


LUIS W. ALVAREZ receives the Nobel Prize in physics this month "for his decisive contributions to elementary-particle physics, in particular the discovery of a large number of resonance states" through his development of hydrogen-bubble-chamber technique and data analysis. A professor at the University of California, Berkeley, Alvarez will become president of the American Physical Society at the society's February meeting.

First Photomultiplier with a Gallium Phosphide Dynode-Offers Order of **Magnitude Improvement**

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RCA-C31000D is a 12-stage, bialkali, photocathode type photomultiplier utilizing Gallium Phosphide as the first dynode secondary emission material. At a cathode to dynode No. 1 voltage of 900 volts, the first dynode secondary emission ratio is typically 45.

For more information on RCA Photomultipliers and RCA-C31000D in particular, see your RCA Representative. For technical data, write: RCA Electronic Components, Commercial Engineering, Section No. L159P, Harrison, New Jersey 07029.



many years with the physics program at the National Science Foundation and is now on leave from his job with the Commerce Department in Washington.

W. Lewis Hyde, provost of University Heights of New York University, is president-elect of the Optical Society of America, effective 1 Jan. New directors-at-large are James L. Harris of the University of California at San Diego, William L. Wolfe of Honeywell Radiation Center and Peter Franken of the University of Michigan.

Elected vice-president-director of research for General Telephone & Electronics Laboratories is Paul E. Ritt.

John W. DeWire has been named associate director of the Cornell University Laboratory of Nuclear Studies. DeWire's emphasis will be on coördination of research activities at Cornell's 10-GeV synchrotron.

At the University of Rochester Albert Simon was appointed professor.

Gordon A. Newkirk was appointed associate director of the National Center for Atmospheric Research and director of the NCAR High Altitude Observatory. He is also professor adjoint at the University of Colorado.

H. A. Sandmeier is on a six-month leave from the University of California, Los Alamos Scientific Laboratory, to serve as visiting professor at the University of Stuttgart, Germany.

Named chairman of the Atomic Energy Commission Advisory Committee on Isotopes and Radiation Development is John W. Landis.

The University of Massachusetts, Amherst, dept of physics and astronomy promoted Leroy F. Cook and Phillips R. Jones to professor. Appointed associate professors are Dietrich Freytag and Gerald A. Peterson, formerly of CERN and Yale respectively. Richard G. Huguenin of Harvard was appointed associate professor of astronomy; Allan R. Hoffman of Brown and James F. Walker of MIT are assistant professors and William A. Dent is assistant professor of astronomy.

Everett M. Hafner, previously with the University of Rochester, has become dean of the School of Natural Science of Hampshire College in Amherst, Mass.

An associate chemist for Argonne National Laboratory, **Donald L. Horrocks**, was named assistant editor of *Applied Spectroscopy*.

Brian J. Thompson has become director of the University of Rochester Institute of Optics and professor of optics. He was formerly general manager of the West Coast branch of Technical Operations, Inc.



R. WALTER CUNNINGHAM, one of the three astronauts on the 11-day Apollo 7 earth-orbital flight, is a physicist. Marsh W. White, Sigma Pi Sigma president, tells us he is a member of that organization and the American Geophysical Union. Cunningham took his bachelor's and master's degrees in physics at UCLA and had nearly completed his doctorate when he entered the space program as a civilian astronaut.

Donald P. Burcham has been promoted to manager of the Jet Propulsion Laboratory space sciences division.

Kuo Wei Chang was appointed senior scientist at Space Sciences Inc.

John Wheeler Receives AEC 1968 Enrico Fermi Award

The 1968 Enrico Fermi Award, given by the Atomic Energy Commission,



will go this month to John Archibald Wheeler. He is the Joseph Henry Professor of Physics at Princeton and is honored for his pioneering contributions to understanding nuclear fission

and to developing the technology of plutonium-production reactors and his continuing broad contributions to nuclear science.

The award, which includes \$25 000, a gold medal and a citation, is named

for Enrico Fermi, who helped achieve the first sustained controlled nuclear reaction.

Wheeler served in 1943 as consultant and guide to the du Pont Company in the design and construction of the Hanford reactors. He urged a conservative design to overcome the Xe¹³⁵ poisoning which appeared when reactors began to operate in 1944. He also worked on reactor shielding theory, reactor control and problems of reactor heating. After the war, at Los Alamos and Princeton, he made fundamental contributions to the work on thermal fusion, both explosive and controlled.

In 1946 Wheeler was a pioneer in the theory of positronium and later in the theory of muons and muonic atoms. He was among the first to consider the effects of rotational and vibrational degrees of freedom in accounting for low-lying excited states of nuclei. Wheeler also studied the application of optical dispersion relations to elementary-particle physics.

ASA Honors Hale Sabine For Architectural Acoustics

The Acoustical Society of America has honored Hale J. Sabine with its Wallace Clement Sabine Award. The award recognizes Sabine's contributions to the theory and practice of architectural acoustics, his studies of the theory of sound absorbing materials and his leadership in the development of standard procedures for measuring acoustical properties of materials.

The award is given every two years