At the Colloquium on Oct. 26, 1962, Dr. E. J. Sternglass from the Westinghouse Research Laboratories presented for the first time a new, revolutionary theory of the elementary particles. He starts out with the viewpoint that the many recently-discovered "elementary" particles (of which more than 40 are now believed to exist) cannot really all be elementary. Rather, he tries to build composite particles from a few truly elementary ones. The only candidates for this rôle are the electron and positron (although the proton and antiproton might also be needed to explain the so-called hyperons).

With these building blocks, and using nothing more abstruse than classical relativity theory and Bohr's quantization postulates, Dr. Sternglass has succeeded in constructing composite particles which he is able to identify with many of the known "elementary" particles. Among these are the pions, muons, kaons and all of the recently discovered "resonances" such as the eta, rho, omega, and alpha. Almost all of the properties of these particles predicted on the basis of this semiclassical model correspond to their measured values, within experimental error, and none are in serious conflict with experiment. No particles have been predicted which have not been found, so long as the energy required for their production is available to present-day accelerators, but some new particles whose production energy has not yet been quite reached by these accelerators have been predicted. Some difficulties concerning the consistency of the theory, as presently formulated, remain unsolved. If this theory turns out to be essentially correct, it will represent the most remarkable advance in the past 30 years in our understanding of elementary particles.

E. F. Gray

### HONORS AND APPOINTMENTS

Gordon L. Dugger, Supervisor of the Advanced Propulsion Project of the Bumblebee Flight Research Group, has been appointed a member of the editorial board of *Astronautics* magazine.

Ralph E. Gibson, Director of the Applied Physics Laboratory, has been appointed Chairman of the Committee on Cooperation Among Scientists of the American Association for the Advancement of Science.

Walter A. Good, Supervisor of the Controls Group, has been elected Vice President of the Committee of International Aeromodeling of the Fédération Aéronautique Internationale.

Wilbur H. Goss, Assistant Director, Technical Evaluation, was awarded the Howard N. Potts Medal by the Franklin Institute on Oct. 7, 1962. He was honored for his technical effort and leadership that led to development of the first successful supersonic ramjet and for development of ramjet combustion systems.

Fenton L. Kennedy, Supervisor of the APL Document Library, has been elected Vice President of the Washington D. C. Chapter of the Special Libraries Association. Mr. Kennedy has also been appointed Editor of *Sci-Tech News*, official bulletin of the Science Technology Division, Special Libraries Association.

Robert C. Morton, Supervisor of the Polaris Analysis and Evaluation Group and Assistant Supervisor of the Polaris Division, received an honorary Doctor of Engineering degree from the University of Rhode Island.

Robert P. Rich, Supervisor of the Bumblebee Computing Center, has been appointed Director of the University Computing Center of The Johns Hopkins University.

### PATENTS

U. S. Government patents recently issued to Laboratory staff members for inventions produced in support of APL objectives.


**Addresses**

The listing below comprises the principal recent addresses made by APL staff members to groups and organizations outside the Laboratory.


**Journal Publications**

The following list is a compilation of recently published books and technical articles written by APL staff members.

- J. Apel (APL), S. F. Singer (University of Maryland), and R. Wentworth (Lockheed Aircraft Corp.), "Effects of Trapped Particles on the Geomagnetic Field," *Advances in Geophysics, IX*, 1962, 131-189.