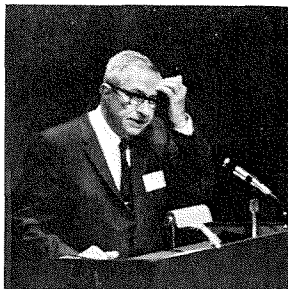
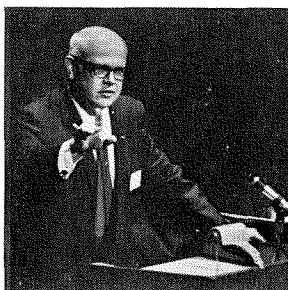


## Speaking of Science—*The men who took part in “The Far Reach of Science.”*



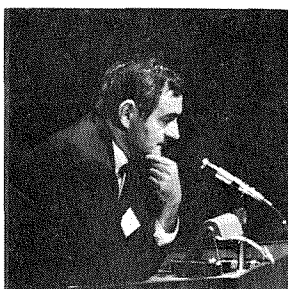
### *An Introduction*

LEE A. DuBRIDGE. In the 22 years that Lee DuBridge has been president of the California Institute of Technology he has devoted endless energy and enthusiasm to improving the quality of education—in particular, scientific education. His participation in “The Far Reach of Science” is a further contribution to that cause.



### *The Nature of the Universe*

WILLIAM A. FOWLER has been studying the structure and behavior of atomic nuclei for 32 years at Caltech. In the last 20 years, however, he has used his knowledge and skills to do important research on the synthesis of elements in stars. Along with two colleagues he has outlined a theory of the origin of the solar system which may serve as a key to understanding the history of the entire universe.



### *The Nature of Life—I*

ROBERT L. SINSHEIMER is professor of biophysics, chairman of Caltech's division of biology, and a gifted writer, particularly on the subject of the moral responsibility of the scientist for the future of man. His most recent scientific achievement—his part in creating the first artificial synthesis of active DNA of the virus Phi X 174.



### *The Nature of Life—II*

JAMES BONNER. When Dr. Bonner first came to Caltech in 1935, he was involved in plant biology. Since then he has worked in biochemistry, biophysics, and on the molecular basis of the control of genetic activity in both plants and animals. Most recently he has become interested in the molecular problems of the brain and the basis of memory. With this wide range of interests Dr. Bonner is well qualified to make some interesting predictions about the future of genetics.



### *A Summing Up*

HARRISON BROWN, professor of geochemistry and of science and government, has interests which go far beyond the confines of his specialties—geochemistry and planetary science. His absorption with the interaction of science and society has led him to devote his capacities to building up international relationships among scientists throughout the world—especially through his duties as foreign secretary of the National Academy of Sciences.

### *The Nature of Matter*

MURRAY GELL-MANN, first Robert Andrews Millikan Professor of Physics at Caltech, established a theory predicting the pattern of subatomic elementary particles in 1962. Two years later the discovery of the omega-minus particle confirmed the theory. Dr. Gell-Mann's symposium talk, about these patterns and their origin, originally appeared in *Engineering and Science* in January 1967.