

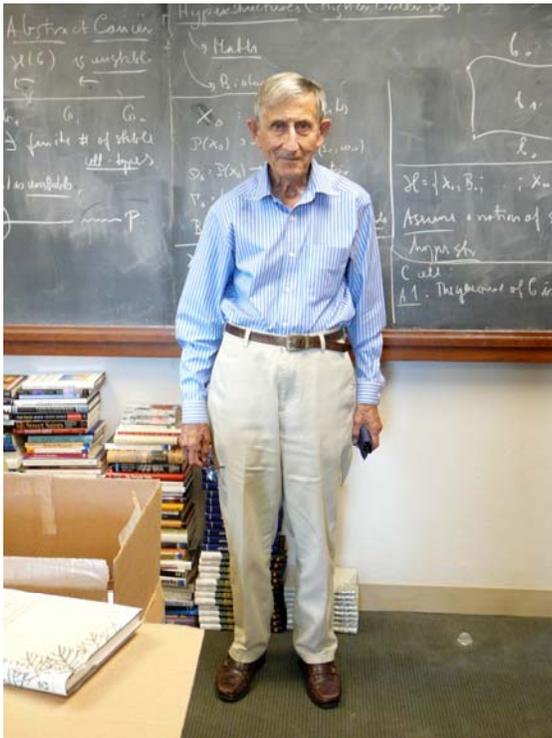


Fr. Stanley L. Jaki, O.S.B Distinguished Lecture

Living Through Four Revolutions

Professor Freeman Dyson

Professor Emeritus of Physics
Institute for Advanced Studies
Princeton, New Jersey



This talk will be a quick ride through the history of science and technology for the last 65 years. I had the tremendous luck to come of age as a scientist as World War 2 ended in 1945, at exactly the moment when four simultaneous revolutions were beginning. The four revolutions were space, nuclear energy, genomics, and electronic computing. I happened to be at the right places at the right times, and to know the right people, so that I had front-seat views of the revolutions as they happened. I was lucky enough to make a modest contribution to two of them. I will describe how the revolutions started, how they slowly transformed the world during the past half century, and how they are still transforming it today. My tentative verdict is the following: nuclear energy was a flop, computing was an overwhelming success, space and genomics are just now starting to show what they can do.

The College of Arts and Science and the Department of Physics is grateful for the support received from the President's Advisory Council members for this Distinguished Guest Lecturer Series event.

Physics on the Edge

Monday, November 14, 2011 @ 6:00pm

Helen Lerner Amphitheatre (McNulty Hall – Rm 101)

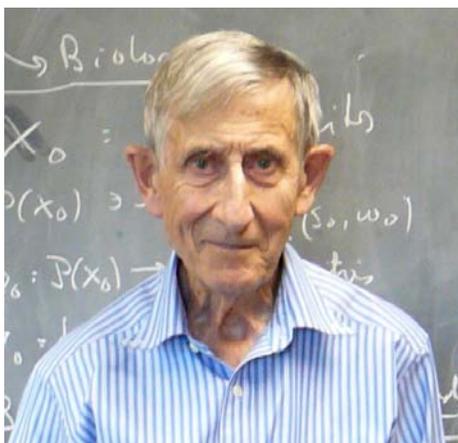
SHU Physics



Professor Freeman Dyson

Institute for Advanced Studies

Professor Freeman Dyson is currently Professor Emeritus of Physics at the Institute for Advanced Study in Princeton, New Jersey. He was born in England and worked as a civilian scientist for the Royal Air Force during World War 2. He graduated from Cambridge University in 1945 with a BA degree in mathematics. He went on to Cornell University as a graduate student in 1947 and worked with Hans Bethe and Richard Feynman. His most useful contribution to science was the unification of the three versions of quantum electrodynamics invented by Feynman, Schwinger, and Tomonaga. Cornell University made him a professor without bothering about his lack of Ph.D. He subsequently worked on nuclear reactors, solid state physics, ferromagnetism, astrophysics and biology, looking for problems where elegant mathematics could be usefully applied. He has written a number of books about science for the general public. *Disturbing the universe* (1974) is a portrait-gallery of people he has known during his career as a scientist. *Weapons of Hope* (1984) is a study of ethical problems of war and peace. *Infinite in all directions* (1988) is a philosophical meditation based on Dyson's Gifford Lectures on Natural Theology given at the University of Aberdeen in Scotland. *Origins of Life* (1986, second edition 1999) is a study of one of the major unsolved problems of science. *The sun, the Genome and the Internet* (1999) discusses the question of whether modern technology could be used to narrow the gap between rich and poor rather than widen it. Dyson is a fellow of the American Physical Society, a member of the US National Academy of Sciences, and a fellow of the Royal Society of London. In 2000 he was awarded the Templeton Prize for progress in Religion.



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