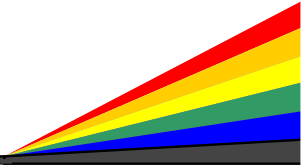


APS COLLOQUIUM SERIES



SPEAKER: Albert J. Libchaber
Rockefeller University

Albert J. Libchaber, an experimental physicist, studies the implications of nonlinear dynamics on the physical world, including the biological sciences. His research centers on the problem of pattern formation and stability and also on the evolution of fluids from laminar states to chaotic and turbulent ones. He had previously worked on various aspects of low temperature physics. He is now working on aspects of cell biology related to self-organization and to the flow of molecular information. Libchaber is a Detlev W. Bronk University Professor of Physics and a member of the faculty of The Rockefeller University and a Fellow of NEC Research Institute. He is also a Directeur de Recherche de classe exceptionnelle of the Centre National de la Recherche Scientifique, France (on leave of absence). He received both the Wolf prize in Physics and a MacArthur Foundation Fellowship in 1986 and 1991, respectively. Born October 23, 1934, in Paris, France, Libchaber received a Bachelor's Degree in Mathematics from the University of Paris and a Ph.D. from Ecole Normale Supérieure, Paris, where he pursued his research until he joined The University of Chicago in 1983, Princeton University in 1991 and The Rockefeller University in 1994. He is a Corresponding Member of the French Academy of Sciences and a member of the American Academy of Arts and Sciences, as well as of the New York Academy of Sciences.

TITLE: Reading Genomes and Gene

Molecular recognition of DNA sequences is achieved by DNA hybridization of complementary sequences. We present various scenarios for optimization, leading to microarrays and global measurement. Gene expression can be controlled using gene constructs immobilized on a template with micron scale temperature heaters. We will discuss and present results on protein microarrays.

DATE: Wednesday, April 5, 2000

TIME: 4:15 p.m.

LOCATION: 402 Auditorium