Institute for Advanced Study

Distinguished Lecture Series

A Hundred Years of Nanoscience and Superconductivity

Marvin Cohen

UC Berkeley

Abstract

I will discuss some of the history and conceptual underpinnings of condensed matter physics with examples related to research on the electronic structure of solids, nanoscience, and superconductivity. I willl then focus on some recent work in these areas and current research that my colleagues and I have been doing.

About the Speaker

Marvin L. Cohen is University Professor of Physics at the University of California at Berkeley and Senior Faculty Scientist at the Lawrence Berkeley National Laboratory. Cohen's current and past research covers a broad spectrum of subjects in theoretical condensed matter physics. He is a recipient of the US National Medal of Science, the APS Oliver E. Buckley Prize for Solid State Physics, the APS Julius Edgar Lilienfeld Prize, the Foresight Institute Richard P. Feynman Prize in Nanotechnology, and the Technology Pioneer Award from the World Economic Forum along with numerous other honors and a Doctorat Honoris Causa, University of Montreal. Cohen has contributed more than 750 technical publications. He is a Fellow of the American Physical Society, a member of the National Academy of Sciences, the American Academy of Arts and Sciences, the American Philosophical Society, and a Fellow of the American Association for the Advancement of Science. In 2005, Cohen was President of the American Physical Society (APS), an organization representing more than 47,000 physicists in universities, industry and national laboratories.

Prof Cohen is an advisor to HKUST IAS.