

**THE UNIVERSITY OF HONG KONG**  
**COLLOQUIUM SERIES IN PHYSICS DEPARTMENT**

**Einstein, Condensed Matter Physics,  
Nanoscience, and Superconductivity**

**Prof. Marvin L. Cohen**

*University of California at Berkeley, and Lawrence Berkeley National Laboratory*

**Time: Wednesday, December 5, 2012, 4:30 p.m.**

**Venue: Lecture Theatre P4, Chong Yuet Ming Physics Building,  
The University of Hong Kong**

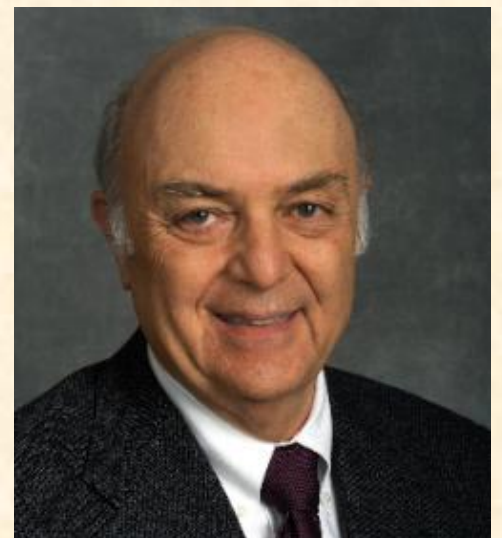
**Abstract:**

I will describe a few observations about Einstein and his research in condensed matter physics. Einstein had difficulty getting his thesis subject approved despite some excellent proposals that I will discuss. As is well known, he contributed at the forefront in many fields, but I'll focus on only a few in condensed matter and quantum physics. In particular, I'll discuss the background of this area of physics and some recent work in photovoltaics, nanoscience and superconductivity. In the latter field, Einstein suggested that we might never have a theoretical explanation, but Einstein was not always right.

**About the Speaker:**

Marvin Cohen received Ph. D. in Physics at the University of Chicago in 1964. He has been University Professor of Univ. of California, Berkeley since 1995. His current and past research covers a broad spectrum of subjects in theoretical condensed matter physics. He is best known for his work with pseudo-potentials with applications to electronic, optical, and structural properties of materials, superconductivity, semiconductor physics, and nano-science.

Cohen is a recipient of many prestigious awards, including the US National Medal of Science, the American Physical Society (APS) Oliver E. Buckley Prize for Solid State Physics, the Foresight Institute Richard P. Feynman Prize in Nanotechnology, and the Technology Pioneer Award from the World Economic Forum. He is a member of the US National Academy of Sciences, the American Academy of Arts and Sciences. He was President of the APS in 2005. Cohen was a featured speaker for the Electron Birthday Project (televised to US high schools).



\*\*\*\*\*  
Physics colloquium series is organized to introduce cutting edge researches and new development in physics, designed to be suitable to graduate and undergraduate students, and also to scientists working on different fields. Each colloquium will generally start with an extensive introduction of the background of the field, followed by forefront research topics and results. The colloquium will serve as an education forum for students and laymen alike, and also serve as a platform for exchange and update their knowledge of various branches of physics among academic staff members.

*Coffee and tea will be served 20 minutes prior to the colloquium*  
**Anyone interested is welcome to attend**

Physics Department, HKU Phone: 28592360 Fax: 25599152.