



**THE CHINESE UNIVERSITY OF HONG KONG**  
**Department of Physics and**  
**School of Life Sciences**  
*JOINT SEMINAR*

# **Mechanisms of Programmed Cell Death through Structural Biology**

*by*

**Professor Yigong SHI (施一公教授)**  
**University Professor**  
**Dean of the School of Life Sciences, Tsinghua University, China**  
**C N Yang Lecturer in Physics, CUHK**

*Date: April 24, 2015 (Friday)*

*Time: 4:30 - 6:00 p.m.*

*Place: L2, Science Centre, CUHK*

**ALL INTERESTED ARE WELCOME**  
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## **Abstract**

Programmed cell death, also known as apoptosis, is central to the development and homeostasis of metazoans. Dysregulation of apoptosis leads to a variety of human pathologies, including cancer, autoimmune diseases, and neurodegenerative disorders. Since the concept of apoptosis was established in 1972, research efforts have led to the identification of hundreds of genes that govern the initiation, execution, and regulation of apoptosis primarily in three model organisms: *Caenorhabditis elegans*, *Drosophila melanogaster*, and mammals. The central pathway of apoptosis is conserved among the three organisms and involves the activation of cell-killing proteases known as caspases. In this lecture, I describe systematic characterization of the molecular mechanisms of programmed cell death by an integrated approach of structural biochemistry and biophysics.