



## Seminar Series

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**Speaker :** Professor Lam Hui (許林教授)  
Department of Physics, Columbia University, USA

**Dates :** June 27, July 4 & July 11, 2007

**Time :** 3:30 p.m. – 5:30 p.m.

**Venue :** Room LG23, LG/F., Science Centre, CUHK

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### **Talk 1** Dark Energy and the Homogeneous Universe

*We introduce the basic concepts of a homogeneous, isotropic and expanding universe, and discuss the surprising recent finding that the present universe appears to be accelerating, suggesting the existence of a mysterious component known as dark energy, the simplest example of which is Einstein's cosmological constant.*

### **Talk 2** Dark Matter and the Large Scale Structure of the Universe

*We introduce the prevalent structure formation paradigm: gravitational instability, where dark matter plays a dominant role. The many manifestations of the cosmic large scale structure are discussed: the microwave background, the intergalactic medium, galaxies and gravitational lensing.*

### **Talk 3** Inflation and the Early Universe

*We introduce the basic ideas of inflation as a theory of the initial conditions of the universe, and discuss its observational success and conceptual difficulties.*

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**ALL INTERESTED ARE WELCOME**

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