



THE CHINESE UNIVERSITY OF HONG KONG  
*Department of Physics*  
COLLOQUIUM

## Network --- the Architecture of Complexity

*by*

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*Date: February 3, 2012 (Friday)*

*Time: 4:00 - 5:00 p.m.*

*Place: L2 Science Centre, CUHK*

*(Light refreshments will be served 20 minutes prior to the colloquium.)*

ALL INTERESTED ARE WELCOME

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### Abstract

As an emerging scientific discipline, network science has been at the forefront of complex systems for more than a decade. Its big impact has been demonstrated through many applications pertaining to a wide range of systems from physical or engineered networks, to biological networks and social networks. Despite the diversity of complex networks, several basic universal principles that govern their topology and evolution have been proposed and verified. In this talk, I will introduce these universal principles and discuss their impacts on several interesting network problems, including my recent work on network control. Indeed, while these principles have altered the way we think about many networks that affect our lives, our ultimate goal is to develop the capability to fully control them.

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