# Faculty of Science Public Lecture Series



## A Gentle Introduction to Quantum Information Science

### **Professor Chi-Kwong Ll**

Ferguson Professor of Mathematics, The College of William & Mary, USA and Y C Wong Lecturer, The University of Hong Kong

Date: January 14, 2010 (Thursday) Time: 5.30pm (Refreshments from 5pm) Venue: Rayson Huang Theatre The University of Hong Kong Medium: English Admission: Free



### Abstract

Quantum Information science concerns the study of the use of quantum effects in constructing fast computing devices and designing secure communicating schemes. Advancement in this area will have significant impact on activities in business, industry, engineering, and many branches of sciences. For instance, it will lead to great improvement in security and efficiency issues on financial transaction, data storage and transmission, network connection, computing and simulation of quantum systems. In this talk, a gentle introduction of the subject will be given. Some current research directions will be discussed. (No quantum mechanics background is needed to understand the lecture.)



#### About the Speaker

Professor Chi-Kwong Li received his mathematics BA and PhD degrees from The University of Hong Kong. He is currently the Ferguson Professor of Mathematics at the College of William and Mary, an honorary professor of the Taiyuan University of Technology, and Y.C. Wong Lecturer of The University of Hong Kong. He has received many awards in research and teaching including the Outstanding Faculty Award of Virginia.

His research interest is on matrix, operator theory and their applications, and he has been focusing on quantum information science in recent years. He has published about 250 research articles. He is the chief editor of two research journals, and is on the editorial boards of other three. He is currently the vice president of the International Linear Algebra Society. Besides mathematics, he enjoys reading, music, and cooking.

*Please visit www.hku.hk/science/quantum for seat reservation. For enquiries, please call Miss Lee at Faculty of Science at 2241 5861.*