# UNIVERSITY OF MACAU FACULTY OF SCIENCE AND TECHNOLOGY DEPARTMENT of MATHEMATICS

Ref: FST/SEM/00023/2011

## "Quantum error correction and generalized numerical ranges"

by

#### Prof. Chi-Kwong Li

Ferguson Professor Department of Mathematics College of William and Mary, USA

Visiting Professor of Mathematics
(2011 Fulbright Fellow)
Hong Kong University of Science and Technology

Date : 25/03/2011 (FRIDAY)

Time : 16:00 – 17:00

Venue : J215

#### **Abstract**

The numerical range is a useful tool for studying matrices and operators, and there are many generalizations of the concept motivated by theory and applications. In this talk, we will focus on the higher rank numerical range, which arises from the study of quantum error correction. Recent results and open problems on the topic will be described.

### **Biography**

Prof. Chi-Kwong Li is currently Visiting Professor of Mathematics in the Hong Kong University of Science and Technology and the Ferguson Professor of

Mathematics of the Department of Mathematics of the College of William and Mary. He is awarded the 2011 Fulbright award is the vice president of the International Linear Algebra Society. His research areas are: Matrix theory, operator theory, combinatorial theory, quantum information science, mathematical biology and mathematical education.

#### **ALL ARE WELCOME!**