香港浸會大學
HONG KONG BAPTIST UNIVERSITY
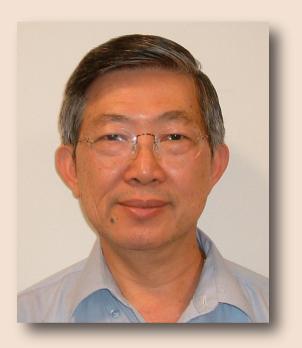
*Department of* **Mathematics**

# Distinguished Lecture Series

# A Computational Method for Optimal Control Problems Governed by Nonlinear Switched Systems

# Professor Kok Lay Teo

*John Curtin Distinguished Professor*
*Curtin University of Technology, Australia*

Date:    28 April 2017 (Friday)

Time:    11:00 am - 12:00 noon (Preceded by Reception at 10:30 am)

Venue:   WLB104, Mrs. Padma Harilela Lecture Theatre,
Lam Woo International Conference Centre, Shaw Campus,
Hong Kong Baptist University

## Abstract

Switched systems operate by switching among various modes or subsystems. This talk considers optimal control problems governed by nonlinear switched systems in which the mode dynamics are described by nonlinear differential equations. A computational method for computing the optimal control for this optimal control problem is to be presented. This computational method is based on some key ideas in optimal control computation, which include control parameterization, time-scaling transformation, and the constraint transcription method. Several examples are discussed.

✦✦✦   All are welcome   ✦✦✦

For enquires please contact  Ms. Claudia Chui, 3411 2348.
http://www.math.hkbu.edu.hk/