



## Centre for Mathematical Imaging and Vision Distinguished Lecture

## An Inverse Problem in Bar Code Decoding

Speaker	:	Prof. Fadil Santosa
		SIAM Fellow
		Director, Institute for Mathematics and its Applications
		Professor, School of Mathematics, University of Minnesota
Date	:	13 October 2014 (Monday)
Time	:	4:30 p.m 5:30 p.m.
		(Preceded by Tea Reception at 4:00 p.m.)
Venue	:	SCT909
		Cha Chi-ming Science Tower
		HSH Campus
		Hong Kong Baptist University

## Abstract:

Bar codes are ubiquitous -- they are used to identify products in stores, parts in a warehouse, and books in a library, etc. In this talk, the speaker will describe how information is encoded in a bar code and how it is read by a scanner. The presentation will go over how the decoding process, from scanner signal to coded information, can be formulated as an inverse problem. The inverse problem involves finding the "word" hidden in the signal. What makes this inverse problem, and the approach to solve it, somewhat unusual is that the unknown has a finite number of states.

- All interested are welcome -

For further information, please visit <u>http://www.math.hkbu.edu.hk/</u>, or call 3411-5056.