



## PIMS / AMI Seminar

Friday, August 5, 2016 3:00 p.m. CAB 657

## "Adaptive Fourier Decomposition (AFD) of signals"

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## Abstract

The talk will introduce AFD on the unit circle and on the real line and their higher dimensional generalizations. The algorithm was originated from the purpose of positive frequency expansion of signals. Although the algorithm may not result in a basis, it offers an orthogonal system that fast expands the given signal. The idea is close to, but does not belong to any existing greedy algorithm. It, on the other hand, suggests a new form of greedy algorithm outperforming to the existing ones, called pre-orthogonal greedy algorithm, applicable to most reproducing kernel Hilbert spaces.

Refreshments will be served in CAB 649 at 2:30 p.m.