



The Hong Kong University of Science & Technology

Department of Mathematics

PhD Student Seminar

**Functional-Coefficient Autoregressive and
Linear Regression Mixed Model**

By

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Abstract

For nonlinear time series, we study a kind of functional-coefficient autoregressive and linear regression mixed model. We propose a two-stage method to estimate coefficients, in which the first stage estimates function-coefficients based on local polynomial technique by fixing constant coefficients, and the second stage estimates constant coefficients by fixing function-coefficients. Consistency and asymptotic normality of the proposed estimators are established. Simulation studies are conducted to empirically examine the finite sample performance of the proposed method, and a real data example is used for illustration.

Date: Wednesday, 25 April 2018

Time: 2:30 p.m.- 3:30 p.m.

Venue: Room 2126C (near lift 19)

All are welcome!