

The Hong Kong Polytechnic University Department of Applied Mathematics

Seminar On

Empirical Likelihood for a Varying Coefficient Model with Longitudinal Data

by

Professor Lixing Zhu Department of Statistics Hong Kong Baptist University

Abstract

In this talk, I will present confidence bands construction of the coefficient functions in a varying coefficient regression model. Empirical likelihood is applied to deal with it. However, the classical empirical likelihood does not provide a standard chi-square distribution when the bandwidth is optimal in estimating the nonparametric coefficient function. Thus, a bias correction is proposed to deal with this problem. The Wilks theorem holds with our bias corrected empirical likelihood. Simulations are carried out and a real example is analyzed for illustration.

Time : 11:30 a.m. – 12:30 p.m.

Venue : Departmental Conference Room HJ610 The Hong Kong Polytechnic University

*** ALL ARE WELCOME ***