Statistics Seminar

Department of Mathematical Sciences

DATE:	Thursday, Feburary 11, 2016
TIME:	1:15pm to 2:15pm
LOCATION:	WH 100E
SPEAKER:	Qiankun Zhou, Binghamton University
TITLE:	JIVE for Panel Dynamic Simultaneous Equations Model

Abstract

We consider the method of moments estimation of panel dynamic simultaneous equations models under different sample size combination of cross-sectional dimension, N; and time series dimension, T. We consider two types of linear transformation to remove the individual-specific effects from the model, first difference and forward demeaning. We show that the Alvarez- Arellano type GMM estimation under both transformations is consistent only if T/N→0 as (N,T)→inifty. However, it is asymptotically biased if T^3/N→k \neq 0. Since the validity of statistical inference depends critically on whether an estimator is asymptotically unbiased or not, we investigate the jackknife bias reduction method and derive its limiting distribution.