The Division of Economics and the Economic Growth Centre cordially invite you to a seminar by Professor Myoung-jae Lee

**Speaker**: Professor Myoung-jae Lee  
*Department of Economics*  
*Korea University*

**Topic**: "Extensive and Intensive Margin Effects and Their Hybrid in Sample-Selection Treatment Effects"

**Chairperson**: Assistant Professor Feng Qu  
*Division of Economics*  
*School of Humanities & Social Sciences*

**Date**: Wednesday, 22 January 2014

**Time**: 2:30 pm – 4:00 pm

**Venue**: Meeting Room 5 (HSS-04-89)  
Nanyang Technological University  
School of Humanities and Social Sciences  
14 Nanyang Drive  
Singapore 637332

**About the Speaker:**

Professor Myoung-jae Lee is regarded as one of the top econometricians in Asia. He is currently a professor of economics at Korea University. Prior to that, he taught at Pennsylvania State University, Tilburg University, London School of Economics, Singapore Management University, Chinese University of Hong Kong, Australian National University. He is the author of well cited books, including *Micro-econometrics for policy, program, and treatment effects* (Oxford University Press, 2005) and *Panel data econometrics: methods-of-moments and limited dependent variables* (Academic Press, 2002). His research papers appear in leading econometrics journals, including *Econometrica, Journal of Econometrics, Econometric Theory* and *Journal of Applied Econometrics*.

**Abstract:**

In sample selection models, a treatment can influence the observed outcome in two different ways: affecting the binary selection/participation decision, and affecting the level of latent outcome. The former is called the 'extensive margin effect', and the latter the 'intensive margin effect'. Despite the popularity of these effects in economics, the intensive margin effect is not a causal parameter the way it is used currently, because it is conditioned on the selecting/participating decision which can change when the treatment changes. This paper presents a proper nonparametric causal framework using 'principal stratification', and introduces an additional effect that is a hybrid of the two effects; in total, three effects are needed to understand treatment effects in sample selection models. It is hard to separate those effects in general, but in some popular models (parametric sample-selection models, semiparametric "independence models", semiparametric zero-censored models, and polynomial approximation models), they are separately identified and estimable. This is shown analytically as well as through simulation and empirical illustrations.

**Reservation:**

Admission is free. Please reply to Christina, e-mail: achristina@ntu.edu.sg or Tel: 6790-5689 to confirm your attendance.