



Nanyang Technological University

## **DIVISION OF ECONOMICS**

Seminar Series

The Division of Economics invites you to a seminar by Mr Thomas Tao Yang

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- Speaker** : **Mr Thomas Tao Yang**  
*Boston College*
- Topic** : **"Asymptotic Trimming and Rate Adaptive Inference for Endogenous Selection Estimates"**
- Chairperson** : **Associate Professor Joseph Alba**  
*Division of Economics*  
*School of Humanities & Social Sciences*
- Date** : **Thursday, 29 January 2015**
- Time** : **02:30 pm to 04:00 pm**
- Venue** : **Meeting Room 6** (HSS 04-91)  
*Nanyang Technological University*  
*School of Humanities and Social Sciences*  
*14, Nanyang Drive*  
*Singapore 637332*

### **About the Speaker:**

Thomas Tao Yang is a fifth year PhD student in economics at Boston College and will get his PhD degree by the end of May 2015. He received his BS in Mathematics from Jilin University, and MA in Economics from Peking University. He has been a teaching assistant for Econometrics, Statistics, and Microeconomic Theory at both undergraduate and graduate levels. His primary research interests focus on econometric theory and applied econometrics. He has worked on some non-standard asymptotic theory in Econometrics and identification in some micro-econometric models. He also has some applied interests and likes to work with applied econometricians. He published in Journal of Business and Economic Statistics and Canadian Journal of Economics. Two of his working papers recently got revision requests from Journal of Econometrics.

### **Abstract:**

Many estimators can be represented as averages of terms that have heavy-tailed distributions, either due to the structure of the estimator itself or due to the presence of heavy-tailed error terms. These estimators typically converge very slowly and inference after estimation can be difficult. To overcome this problem, this paper proposes a general approach to asymptotic trimming that achieves the fastest rate of convergence possible for the estimator, while satisfying the Lindeberg condition for asymptotic normality. The method is applied to an irregularly converging endogenous selection model (either nonparametrically or semi-parametrically specified), which requires asymptotic trimming of a "special regressor." The optimal value for the trimming parameter is determined, not just an optimal rate. Monte Carlo results show that the method works well in small samples. The method is applied to investigate the gender wage gap in Malaysia. Controlling for endogeneity is found to explain a portion the otherwise unexplained gender wage gap.

### **Reservation:**

Admission is free. Please reply to [d-egc@ntu.edu.sg](mailto:d-egc@ntu.edu.sg) to confirm your attendance.