CRETA 研討會

CRETA Workshop on Advanced Econometrics 20

CRETA is honored to invite Professor Stefan Hoderlein from Boston College as a visitor on March 3. During his visit, Prof. Hoderlein will lecture on nonparametric Random Coefficient Models on CRETA Workshop on Advanced Econometrics 20. The workshop is due to take place on March 3 (Friday) at Da Vinci, GIS NTU Convention Center (集思台大會議中心達文西廳 (台北市羅斯福路四段 85 號 B1)). All participants are welcomed! Please be sure to register your attendance online by noon, March 1 (Wednesday).
(website: http://www.creta.org.tw/?news_3=199).

Date: March 3, 2017 (Fri.), 14:00 pm – 16:50 pm

Venue: GIS NTU Convention Center B1 Da Vinci Hall, Second Student Activity Center, NTU
(集思台大會議中心 B1 達文西廳)

Topics: Nonparametric Random Coefficient Models

Speaker: Professor Stefan Hoderlein, Department of Economics, Boston College,

Host: Center for Research in Econometric Theory and Applications (CRETA), NTU
Taiwan Econometric Society

Registration: Present Students and Faculty of NTU: No Charge
Members of Taiwan Econometric Society: No Charge
台灣大學在學學生及現任教職員和台灣經濟計量學會會員為免費參加

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[About the Speaker]
Professor Hoderlein is currently Professor of Economics at Boston College and also a Fellow of *Journal of Econometrics*. Professor Hoderlein's recent research interests focus on the analytic method of heterogeneity and nonparametrics. His research articles have been published in several prestigious journals, such as *Journal of Econometrics*, and *Econometric Theory*. Professor Hoderlein was elected as Fellow of *Journal of Econometrics* in 2016.

[Lecture Overview]
The main topic of my lecture is centered around micro-econometric models of a heterogeneous population as formalized in random coefficients models. The main idea of random coefficients models is that all individual share a common structural model, but that the coefficients in these models are individual specific and vary continuously across the population. In the first part of the lecture I will provide a general overview of the research in this field. I will start out illustrating the main issue in the simplest case which is the case of a linear model $Y = X'B$, where Y is a dependent variable of interest, X is a K vector of covariates

possibly including a constant, and B is a K vector of unobserved random coefficients. I will specifically focus on how to nonparametrically identify the density f_B of random coefficients and, based on these insights, how to construct a nonparametric sample counterparts estimator. I will then give an overview of related research in nonlinear random coefficients models.

The second part of the lecture will be devoted to a specific nonlinear model, which is called a triangular random coefficients model. The triangular structure is designed to capture the notion of endogeneity, and hence generalize the standard linear IV model by use of a second equation that details how the endogenous regressor is related to an exogenous instrument. In this model, in the absence of additional identifying assumptions non-identification prevails, as is shown formally. Explicit bounds are derived, but the focus of this part of the lecture is on showing nonparametric identification under additional assumptions. Moreover, a sample counterparts estimator is being proposed, and its large sample properties analyzed. Finally, we also provide an application to consumer demand."

[Program]

- **March 3 (Fri.) GIS NTU Convention Center B1 Da Vinci Hall (B1 達文西廳)**
  13:30-14:00: Registration
  14:00-15:10: Lecture 1
  15:10-15:30: Tea Break
  15:30-16:50: Lecture 2 and Discussion
  *Lectures in English