



國立臺灣大學

計量理論與應用研究中心

CRETA

CENTER FOR RESEARCH IN ECONOMETRIC THEORY AND APPLICATIONS
NATIONAL TAIWAN UNIVERSITY

NEWSLETTER

2014 年第 2 期
Issue 02, 2014

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● 中心重要訊息 Major Events

- *Professor Peter Michael Robinson 受邀主講 CRETA Workshop on Advanced Econometrics 16
- *Professor Michael R. Powers 受邀主講 CRETA Workshop on Risk Theory 4
- *CRETA Workshop on Investment 1

● 中心活動預告 Future Events

- *2014.11.01 - 2014 年臺灣經濟計量學會年會

2013 年 12 月 17 日，校人字第 1020102261 號函同意聘任國立臺灣大學陳良基副校長、國立臺灣大學經濟學系王泓仁教授和劉錦添教授、國立臺灣大學國際企業學系陳思寬教授、中央研究院胡勝正院士、中央研究院經濟研究所簡錦漢所長、國立政治大學經濟學系陳樹衡教授、國立清華大學科技管理學院黃朝熙院長及國立交通大學財務金融所俞明德教授，擔任中心諮詢委員會委員。103 年諮詢委員會會議於 2014 年 4 月 24 日上午 10 時假國立臺灣大學校總區行政大樓 1 樓第 3 會議室舉行，討論中心業務成果報告及未來發展等議題。



活動預告

2014 年臺灣經濟計量學會年會將由臺灣經濟計量學會 (TES)、國立臺灣大學社會科學院及國立臺灣大學計量理論與應用研究中心 (CRETA) 共同舉辦。年會將於 11 月 1 日 (六) 假國立臺灣大學社會科學院舉行。本次年會很榮幸邀請到 Prof. Jong-Wha Lee (Korea University) 進行一場「Education and Economic Development: Empirical Findings and Policy Implications」專題演講。

目前年會的徵稿活動已經開始，歡迎經濟計量方法之理論研究或各相關領域（經濟、財務、行銷等）之實證研究參與論文發表。本次優秀的會議論文，經審查後將刊登在臺大經濟論文叢刊的特刊中，特此感謝臺大經濟論文叢刊之協助。詳細情形請參閱臺灣經濟計量學會網站：<http://www.tesociety.org.tw/main.php>。

CRETA 主辦

2014 年 3 月 7 日 (五)

CRETA Workshop on Advanced Econometrics 16

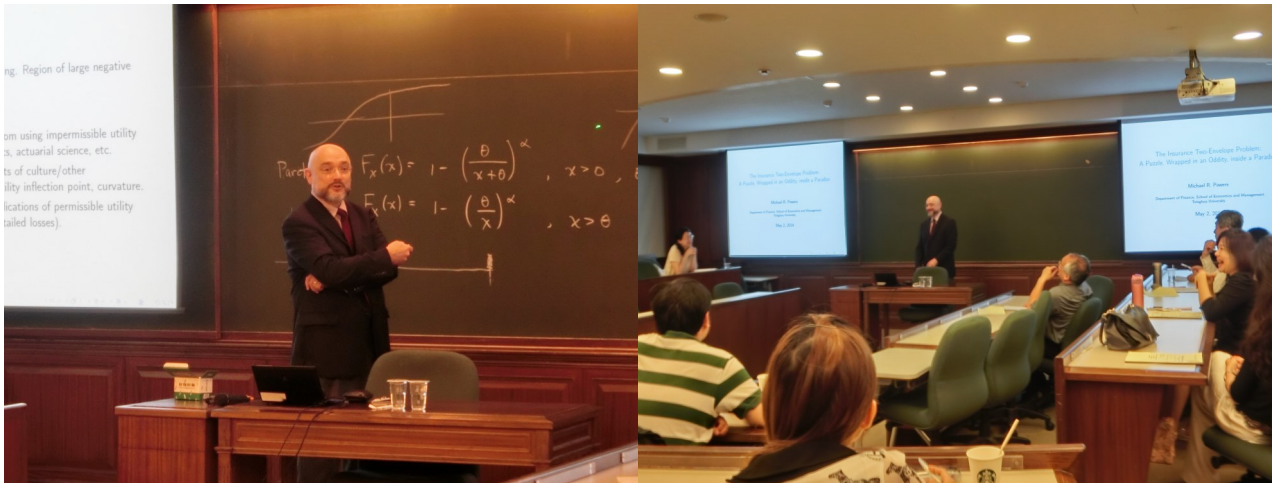


CRETA 很榮幸邀請到 University of London 的 Prof. Peter Michael Robinson 於 Workshop on Advanced Econometrics 16 進行一場題為「Improved Tests for Spatial Correlation」的演講；Prof. Robinson 為國際著名之計量經濟學家，在 *Econometrica*, *Annals of Statistics*, *Journal of the American Statistical Association*, *Journal of Econometrics* 等國際知名期刊上發表過許多論文。

Prof. Robinson 講解如何在實務上處理空間性相關資料。此研究議題不論是模型的架構或資料的分析，都有一定的困難度，使得過去文獻所使用的方法常有一致性與收斂性不佳的問題。因此，Prof. Robinson 提出新的檢定方法，透過 Edgeworth 展開得到檢定統計量，並更進一步證明這樣的方法對於估計臨界值的準確度較以往精準，且滿足一致性；此方法亦改進效率性的問題。

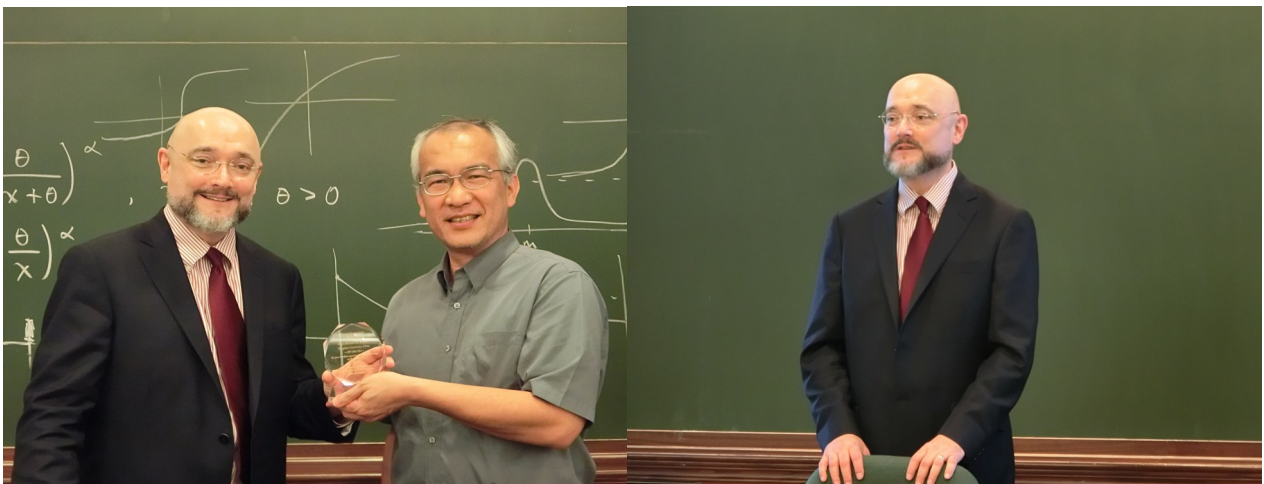
2014 年 5 月 2 日 (五)

CRETA Workshop on Risk Theory 4



CRETA Workshop on Risk Theory 4 很榮幸邀請到中國北京清華大學的 Prof. Michael R. Powers 進行一場關於「The Insurance Two-Envelope Problem: A Puzzle, Wrapped in an Oddity, Inside a Paradox」的專題演講。Prof. Powers 是保險領域的頂尖學者，其論文曾多次發表於 *Journal of Risk and Insurance*, *Insurance: Mathematics and Economics*, and *Risk Analysis* 等國際知名期刊。

Prof. Powers 首先介紹 Insurance Two-Envelope Paradox (ITEP)，並說明如何從這樣的決策者行為得到其對應的效用函數。Prof. Powers 亦詳細講解他所建構的模型，他發現此模型能夠捕捉當投資者面臨極端損失時的特性。因此，此效用函數將可以被應用在保險產業及風險分析。



2014 年 6 月 25 日 (三)

CRETA Workshop on Investment 1

本次研討會主題為程式及高頻交易。第一場研討會由高雄應用科技大學財金系姜林杰祐教授主講，討論市場信念、衍生策略與程式交易實踐。姜林教授首先提出所謂的交易策略應視交易者的市場信念而定，並舉出「相信存在內部規律」、「相信規律具獨占性」、「相信市場隨參與者演化」、「相信市場參與者行為不變」等四個主要信念為例。姜林教授認為隨著信念不同，所應採取的對應策略也不同，最後也依此為程式交易作了更廣泛的定義。

第二場研討會由中研院黎子良院士及黃寶誠博士主講。主要介紹它們目前合作中的著作 *Algorithmic Trading: Data Analytics and Dynamic Optimization* 一書及其研究成果。黎子良院士簡介了該書的內容，並說明運用演算法進行資料分析及程式交易的重要性與可能遇到的困難。黃寶誠博士以實際的例子說明為何以解析度更高的模型在微觀的角度觀察資料可能發現傳統上無法發現的模式，他並講解學術上如何以模型解釋此種現象，進而發展套利的可能性。

研討會後的座談會由梁國源董事長主持，主要與談人包括郭軒岷副總、黃寶誠博士、黎子良院士，以及顏兆陽副總。郭副總以風控的角度說明對程式交易的疑慮，而顏副總則以交易員的角度說明沒有永遠有效的交易模型，端看公司如何在風險與獲利中取得平衡。黃寶誠博士則認為高頻程式交易可能可以降低市場風險，但其疑慮在於操作風險，他也指出這是目前監理機關有所忽略的地方。其後所有與談人也對學術圈及業界的差異提出不同的見解，討論十分熱烈。



定期演講-WETA



三月份 Workshop on Econometrics: Theory and Application (WETA) 邀請到國立臺灣大學財務金融學系的陳彥行教授。陳教授首先介紹近期有些論文把過去在經濟領域討論的工會角色與財務研究作聯結。陳教授更進一步統整財務領域中有關工會研究的議題，包括工會對於公司財務與股價的影響、勞資談判的財務策略與勞工相關的法律改變對財務的影響。陳教授在此次演講對「Labor and Finance」作了很完整的介紹，使與會人獲益良多。

四月份 WETA 邀請到中央研究院經濟研究所的廖仁哲教授進行學術分享，廖教授首先回顧過去文獻如何處理各種計量模型的內生性問題，並針對從線性到非線性的無參數模型 (non-parametric models) 進行講解。廖教授亦分享自己近期的研究，並提出 Triangular Models of Binary Response under Quantile Restrictions，此方法可透過控制函數的方法處理內生性問題與展現模型的統計性質與估計結果。



CRETA 協辦

The 10th International Symposium on Econometric Theory and Applications (SETA 2014)



May 29-30, 2014
Venue: Activity Center, Academia Sinica

SETA 2014
The 10th International Symposium on Econometric Theory and Applications

Co-Organizers: Institute of Economics, Academia Sinica
Taiwan Econometric Society

Associate Organizers:
Bank of Taiwan
Cathay Financial Holdings
Center for Research in Econometric Theory and Applications, National Taiwan University
GreTai Securities Market
Taiwan Securities Association

Keynote Speakers
Bruce E. Hansen (University of Wisconsin-Madison)
Han Hong (Stanford) (ET Lecturer)
George Tauchen (Duke University)

Invited Speakers
Xiaohong Chen (Yale University)
Graham Elliott (University of California, San Diego)
Shakeeb Khan (Duke University)
Liangjun Su (Singapore Management University)
Yoon-Jae Whang (Seoul National University)
Michael Wolf (University of Zurich)

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Yingyao Hu (Johns Hopkins University)
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Katsumi Shimotsu (University of Tokyo)
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Zhijie Xiao (Boston College)
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Chang-Ching Lin (Academia Sinica)
Larry Y. Tzeng (National Taiwan University)
Hung-Jen Wang (National Taiwan University)

Conference Website:
<http://www.econ.sinica.edu.tw/SETA2014>



中央研究院經濟研究所與臺灣經濟計量學會 2014 年 5 月 29 日 (四) 至 30 日 (五) 舉辦「The 10th International Symposium on Econometric Theory and Applications (SETA 2014)」。CRETA、證券櫃檯買賣中心、中華民國證券商業同業公會、國泰金控及臺灣銀行及為此次研討會之協辦單位。

本次研討會很榮幸邀請到 University of Wisconsin-Madison 的 Prof. Bruce E. Hansen、Stanford University 的 Prof. Han Hong 及 Duke University 的 Prof. George Tauchen 三位國際知名學者進行專題演講。除了專題演講外，本次研討會也包括 6 場學術研討會，在學術研討會中共有 57 篇論文發表。希望藉由此次研討會，能使國內學界與業界專家與國際經濟計量研究潮流的接軌。

學者出訪

中心副主任何耕宇教授受邀參加 -

* 2014 年 4 月 8，淡江大學財務金融學系，臺灣

專題演講：The Role of Equity Underwriting Relationships in Mergers and Acquisitions

中心特聘研究員管中閔教授受邀參加 -

* 2014 年 4 月 11 日，臺大管理學院正大國際會議廳，臺灣

會議名：國立臺灣大學 EMBA 商學會經濟論壇

SETA 活動花絮



CRETA is honored to announce that Liang-Gee Chen (National Taiwan University), Shi-Kuan Chen (National Taiwan University), Shu-Heng Chen (National Chengchi University), Sheng-Cheng Hu (Academia Sinica), Chao-Hsi Huang (National Tsing Hua University), Kam-hon Kan (Academia Sinica), Jin-Tan Liu (National Taiwan University), Hung-Jen Wang (National Taiwan University), and Min-The Yu (National Chiao Tung University) have agreed to serve on the Advisory Committee of CRETA. The 2014 CRETA Advisory Committee Meeting was held on April 24, 2014 on NTU campus, and the achievements and the future development plan of CRETA were discussed.



Future Event

November 1 (Sat.) 2014

2014 Taiwan Econometric Society Annual Conference

Taiwan Econometric Society (TES) is now calling for paper for the 2014 TES Annual Conference. The annual conference will be held at College of Social Sciences, National Taiwan University. We are honored to invite Professor Jong-Wha Lee from Korea University as our key-note speaker. For details, please refer to TES website: <http://www.tesociety.org.tw/main.php>.



Hosted by CRETA

March 7 (Friday) 2014

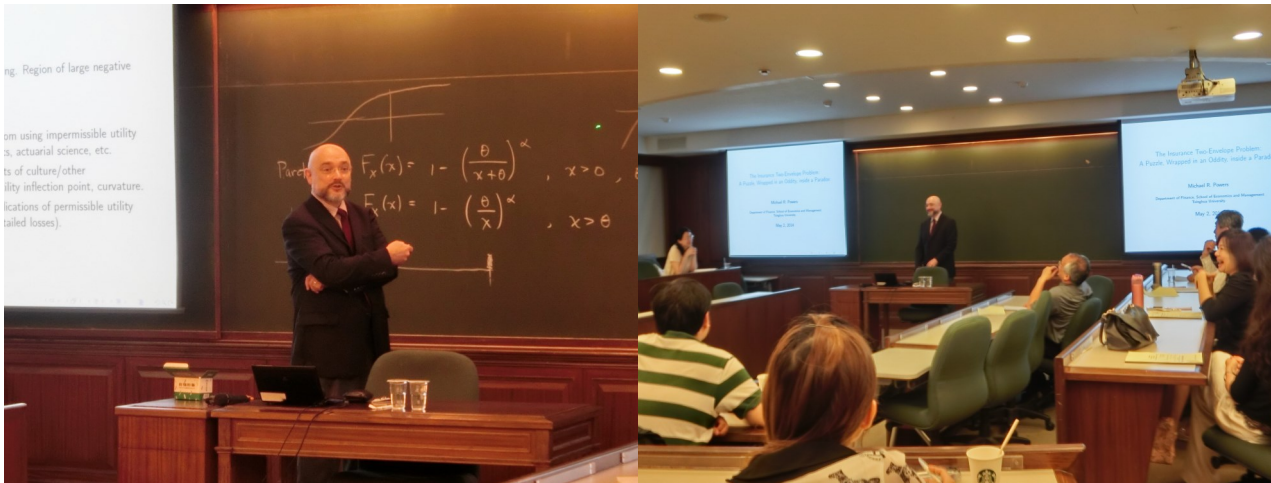
CRETA Workshop on Advanced Econometrics 16



CRETA invited Prof. Peter Michael Robinson (University of London) to give a talk in Workshop on Advanced Econometrics 16. Prof. Robinson has published papers in several prestigious journals, such as *Econometrica*, *Annals of Statistics*, *Journal of the American Statistical Association*, and *Journal of Econometrics*, etc.

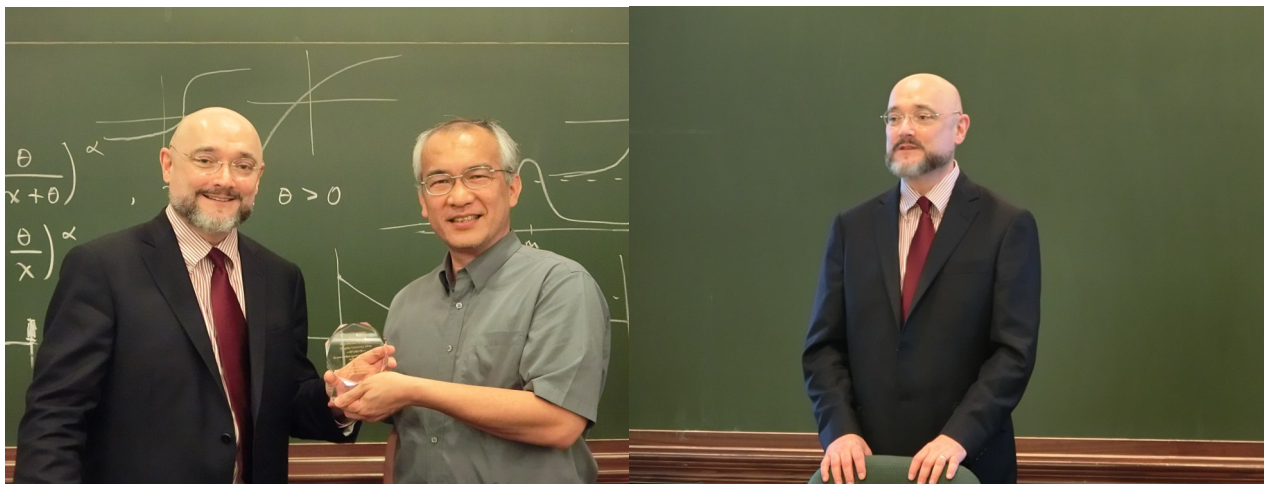
Prof. Robinson introduced the complications and difficulties of modeling and analyzing spatially correlated data; he proposed an improved test by using Edgeworth expansions. Prof. Robinson showed that the critical values of their improved test are more accurate than that of the previous approaches, especially in moderate-size samples, and he also tested the consistency and efficiency of their results.

May 2 (Friday) 2014 CRETA Workshop on Risk Theory 4



CRETA invited Prof. Michael R. Powers (Tsinghua University, China) to the CRETA Workshop on Risk Theory 4 and to give a talk on “The Insurance Two-Envelope Problem: A Puzzle, Wrapped in an Oddity, Inside a Paradox”. Prof. Powers is an outstanding scholar on risk and insurance and has published papers in several prestigious journals, such as *Journal of Risk and Insurance*, *Insurance: Mathematics and Economics*, and *Risk Analysis*, etc.

Prof. Powers introduced Insurance Two-Envelope Paradox (ITEP) and identify the resolution utility functions for ITEP. In this talk, he showed that the permissible utility functions explain a decision maker’s preference in the region of large negative wealth, so the utility functions could be suitable for capturing the impact in insurance industry.



June 25 (Wednesday) 2014 CRETA Workshop on Investment 1

This seminar was about investment and high-frequency trading. We were grateful to invite Prof. Jie-Yu Jiang-Lin to deliver a speech in the first session. Prof. Jiang-Lin proposed that the trading strategy of a trader should depend on his belief on the market; he provided several examples, such as “the belief that market would evolve with its participants,” “the belief of the existence of endogenous discipline,” etc. Also, based on the above concept, he re-defined program trading with a broader definition.

The second talk was given by Prof. Tzu-Leung Lai and Prof. Po-Shin Wong. They mainly talked about their working publication “Algorithmic Trading: Data Analytics and Dynamic Optimization” and the results of their research. Prof. Lai briefly introduced the content of the book and discussed the importance of algorithm and program trading. He explained why there would be difficulties applying these theoretical concepts in reality. Using specific examples, Prof. Wong showed that using higher solution models, we can find patterns that cannot be found under traditional models. He also demonstrated how to model this pattern using academic method and to pursue the possibility of arbitrage.

The conference after the seminar was held by Mr. Kuo-Yuan Liang. The main participants include Mr. Shuan-Min Kuo, Prof. Tzu-Leung Lai, Prof. Po-Shin Wong, and Mr. Jao-Yang Yan expressed his worry about program trading from risk managing perception. Mr. Yan, as a manager of the trading department, contended that there is no long-lived model and that companies have to find a way to balance between profit and risks. Prof. Wong argued that high-frequency trading can lower the market risk, but the operation risk is still a serious concern. He noted that this is where the supervisors should pay more attention to.

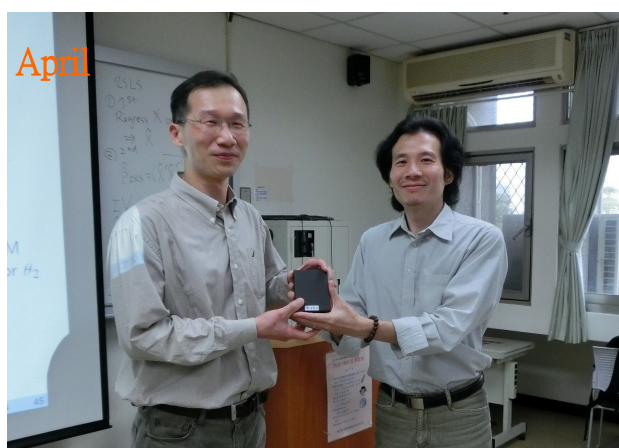


Routine Workshop-WETA



In WETA in March, Prof. Yansheng Chen (National Taiwan University) gave a talk about labor and finance. Prof. Chen indicated that the role of labor unions to the corporate decision making becomes one of the popular issues in finance research. In the workshop, Prof. Chen introduced three main topics about labor unions: how the unions affect the corporate finance and shareholder value, what strategies employer or employee could use to negotiate the contract, and the impacts of the industrial and political actions on corporate finance. He provided a complete review and an empirical introduction.

In WETA in April, Prof. Jenche Liao (Academia Sinica) focused on endogeneity in econometric models. In the first part of the talk, Prof. Liao gave an overview on endogenous econometric models and particularly focus on non-parametric models from linear models to non-linear models using instrumental variable and control functions to handle the endogenous problems. In the second part of his talk, Prof. Liao shared his recent research on Triangular Models of Binary Response under Quantile Restrictions. By using the control functions approach, he showed the statistic properties and estimation results to this model.



Co-Organized by CRETA

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On May 29 and 30, The 10th International Symposium on Econometric Theory and Applications (SETA 2014) was hosted by Institute of Economics, Academia Sinica (IEAS) and Taiwan Econometric Society (TES). CRETA, Bank of Taiwan, Cathay Financial Holdings, GreTai Securities Market, and Taiwan Securities Association provide financial support for this international academic event.

During the conference, we were honored to have 3 internationally renowned scholars as our keynote speakers. They were Prof. Bruce E. Hansen (University of Wisconsin-Madison), Prof. Han Hong (Stanford University), and Prof. George Tauchen (Duke University). In addition to the keynote speeches, the conference also features 6 academic sessions. For academic sessions, there were 57 papers for presentation in the conference.