



ANZAE Summer School

December 8, 2025 | Macquarie University City Campus (level 24/123 Pitt St, Sydney)

The Department of Economics at Macquarie Business School is pleased to host the first Summer School of the <u>Australian and New Zealand Association of Econometricians</u> (ANZAE).

• Lecture 1: Mean-Variance Efficient Portfolios for Large Asset Pools

By Professor Yingying Li (Hong Kong University of Science and Technology)

This lecture will cover a series of recent papers on the estimation of mean-variance optimal portfolios for large asset pools. Topics will include asymptotic mean-variance efficiency, sparse active portfolios, the incorporation of machine learning return predictions, the "factor zoo" and the stochastic discount factor, and the estimation of the efficient frontier with all risky assets.

• Lecture 2: Structural Econometrics for Policy Analysis

By Professor Marc Chan (University of Melbourne)

This lecture introduces the structural econometrics framework for policy analysis. We will cover the motivation for structural modeling, connections to reduced-form methods, and key steps in model specification, estimation, and validation. Recent labor market applications in wage determination, human capital, labor supply elasticity, family, and tax-transfer policy will illustrate how structural models combine economic theory with data to evaluate and simulate policy interventions.





Location: Macquarie University City Campus (Room 2414, level 24, 123 Pitt St, Sydney)

Summer School Schedule

8:30 – 9:00	Registration		
9:00 – 10:30	Lecture 1: Mean-Variance Efficient Portfolios for Large Asset Pools		
	Professor Yingying Li (Hong Kong University of Science and Technology)		
10:30 – 11:00	Morning Tea		
11:00 – 12:30	Lecture 2: Mean-Variance Efficient Portfolios for Large Asset Pools		
	Professor Yingying Li (Hong Kong University of Science and Technology)		
12:30 – 13:30	Lunch		
13:30 – 15:00	Lecture 3: Structural Econometrics for Policy Analysis		
	By Professor Marc Chan (University of Melbourne)		
15:00 – 15:30	Afternoon Tea		
15:30 – 17:00	Lecture 4: Structural Econometrics for Policy Analysis		
	By Professor Marc Chan (University of Melbourne)		





Professor Yingying Li

Yingying Li is Chair Professor and Fung Term Professor of Business in the Departments of Information Systems, Business Statistics and Operations Management (ISOM) and Finance at the Hong Kong University of Science and Technology (HKUST). During the initial stage of HKUST(GZ), she served as the acting head of its FinTech Thrust. Before joining HKUST, Dr. Li was a lecturer and postdoctoral fellow at Princeton University's Bendheim Center for Finance and its Department of Operations Research and Financial Engineering. She received her Ph.D. in Statistics from the University of Chicago. Professor Li is an RGC Senior Research Fellow and an elected Fellow of the Society for Financial Econometrics (SoFiE). Her professional service includes appointments as a council member for SoFiE, a panel member for the Research Grants Council (RGC), and an associate editor for the *Journal of the American Statistical Association, Journal of Econometrics, Journal of Business & Economic Statistics*, and *Journal of Financial Econometrics*. Her research focuses on statistical learning for financial big data, large portfolio optimization, individualized financial decision-making, and volatility estimation and prediction. Her work has been published in top journals across statistics, finance, and economics, such as *Econometrica, Review of Financial Studies, Journal of Financial Economics, Annals of Statistics, Journal of the American Statistical Association*, and *Journal of Econometrics*.

Professor Marc Chan

Marc Chan is Professor of Econometrics at the University of Melbourne. His research develops and applies structural econometric methods to address policy-relevant questions in labour economics and public finance. He is particularly interested in modeling dynamic decision-making under uncertainty, equilibrium effects, and heterogeneity in behavioral responses. His recent work includes dynamic models of welfare participation, job search and matching, human capital accumulation, and family decision-making; estimation techniques for heterogeneous agents and hyperbolic discounting; and methodological advances for program evaluation in the presence of stochastic trends. On the empirical side, Professor Chan has examined the impacts of welfare reform, minimum wages, childcare, and retirement savings incentives, and has contributed to the design and evaluation of tax-transfer systems. His work provides tools for simulating counterfactual policies and understanding distributional impacts. His research has appeared in leading journals, including *Econometrica*, *Review of Economic Studies*, *Quantitative Economics*, *Journal of Business and Economic Statistics*, *Journal of Human Resources*, *Journal of Labor Economics*, *Journal of Public Economics*, *Journal of Health Economics*, and *Annual Review of Economics*. He completed his Ph.D. in Economics from Johns Hopkins University.

Acknowledgement

We acknowledge financial support from the Macquarie Business School, Australian and New Zealand Association of Econometricians, Reserve Bank of Australia, and Australian Research Council Discovery Project DP210100476 (Bin Peng, Wenying Yao and Joakim Westerlund).





The Inaugural AE² Conference

December 9-10, 2025

Location: Macquarie University City Campus (Room 2414/15, level 24, 123 Pitt St, Sydney)

Day 1: December 9

Day 1: December 9			
8:30 - 8:50	Registration		
8:50 – 9:00	Opening Remarks By John Romalis (Macquarie University, Head of Department)		
9:00- 10:30	Session 1 (Chair: Brendan Beare, University of Sydney)		
	Edgeworth Expansions in Curved Cross Section Autoregression By Peter C.B. Phillips (University of Auckland/Yale/SMU) Discussant: Won-Ki Seo (University of Sydney)		
	Time-Varying Generalized Network Autoregressions By Jiti Gao (Monash University) Discussant: Degui Li (University of Macau)		
	Factor Models of Matrix-Valued Time Series: Nonstationarity and Cointegration By Degui Li (University of Macau) Discussant: Jiti Gao (Monash University)		
10:30 – 11:00	Morning Tea		
11:00 – 12:00	Session 2 (Chair: Yingying Li, Hong Kong University of Science and Technology)		
	Likelihood asymptotics of stationary Gaussian arrays By Carsten Chong (Hong Kong University of Science and Technology) Discussant: Peter C.B. Phillips (University of Auckland/Yale/SMU)		
	Admissible Discount Factors: A Semigroup Perspective By Ye Lu (University of Sydney) Discussant: Carsten Chong (Hong Kong University of Science and Technology)		

12:00 – 12:25 Rapid fire session (Chair: Shuping Shi, Macquarie University)

Dimension Reduction for Conditional Density Estimation with





Applications to High-Dimensional Causal Inference

By Fu Ouyang (University of Queensland)

Forecasting the Worst/Best Scenario: A Score Driven Dynamic Maxima Approach

By Xin Tian* (Johns Hopkins University)

Bundle Choice Model with Endogenous Regressors: An Application to Soda Tax

By Tao Sun* (University of Melbourne)

Difference-in-Differences with Sample Selection

By Gayani Rathnayake* (Monash University)

Nowcasting and Decomposing Macroeconomic Risk via Business News and Large Language Model

By Yue Wu* (Chinese Academy of Sciences)

12:25 - 13:10 Lunch

13:10 - 13:45 Poster Presentations

13:45 – 15:15 Session 3 (Chair: John McDermott, Motu Economic and Public Policy Research)

How important is global r-star for open economies?

By James Morley (University of Sydney)

Discussant: Mathew Read (Reserve Bank of Australia)

Revisiting the Relationship Between Uncertainty and Business Cycles Using Shock-percentile Restrictions

By Mathew Read (Reserve Bank of Australia) Discussant: James Morley (University of Sydney)

On Parametric Efficiency of Minimum Distance Estimation

By Reza Hajargasht (Griffith University)

Discussant: Thomas T. Yang (Australian National University)

15:15 – 15:45 Afternoon Tea

15:45 – 17:15 Session 4 (Chair: Marc Chan, University of Melbourne)

The Power Asymmetry in Fuzzy Regression Discontinuity Designs

By Timothy Neal (University of New South Wales)

Discussant: Yue Fang (Chinese University of Hong Kong)





Local Individual Treatment Effects in the Regression Discontinuity Designs

By Jung Hyub Lee* (University of Tokyo)
Discussant: Timothy Neal (University of New South Wales)

The Exact Variance of the Average Treatment Effect Estimator in Cluster RCT

By Yue Fang (Chinese University of Hong Kong)
Discussant: Brendan K. Beare (University of Sydney)

17:15 - 17:45 ANZAE meeting

19:00 – 22:00 Conference Dinner

Venue: Doltone House (48 Pirrama Road, Pyrmont)

Darling Island Wharf, Signorelli Gastronomia Exclusive Room *Entry to the venue opens from 6:30 pm.*





Day 2: December 10

9:00 – 10:30 Session 5 (Chair: Bin Peng, Monash University)

Inference in High-Dimensional IV Models after Lasso Selection

By Firmin Doko Tchatoka (University of Adelaide) Discussant: Seojeong Lee (Seoul National University)

What Impulse Response Do Instrumental Variables Identify?

By Seojeong Lee (Seoul National University)

Discussant: Firmin Doko Tchatoka (University of Adelaide)

Panel Stochastic Frontier Models with Latent Group Structures

By Thomas T. Yang (Australian National University)

Discussant: Bin Peng (Monash University)

10:30 - 11:00 Morning Tea

11:00 – 12:00 Session 6 (Chair: Hanlin Shang, Macquarie University)

Functional regression with persistent nonstationarity and error contamination

By Won-Ki Seo (University of Sydney)

Discussant: Jiazhen Xu (Macquarie University)

Change point detection for random objects with periodic behaviour

By Jiazhen Xu* (Macquarie University)

Discussant: Ye Lu (University of Sydney)

12:00 – 12:25 Rapid fire session (Chair: Firmin Doko Tchatoka, University of Adelaide)

Growth in the Shaded Sun: The Role of International Development Finance and Corruption

By Chansik Yoon* (University of Adelaide)

Semiparametric Estimation of a Heterogenous Truncation Model

By Sizhong Sun (James Cook University)

Bridging Language Barriers: The Impact of Large Language Models on Academic Writing

By Ali Furkan Kalay (Macquarie University)

What Information is Most Relevant for Estimating Output Gaps in Emerging Economies?

By Gilliane Angela De Gorostiza-Roudnitski* (University of Sydney)





Estimation and Inference for Fiscal Multipliers Identified with External Instruments

By Eunkyu Seong* (Seoul National University)

12:25 - 13:10 Lunch

13:10 - 13:45 Poster Presentations

13:45 – 15:15 Session 7 (Chair: Wenying Yao, University of Melbourne)

A Parsimonious Model of the Implied Volatility Surface

By Wei Wei (Monash University)

Discussant: Wenying Yao (University of Melbourne)

Riding a Bubble A Study of Market-Timing Trading Strategies

By Simon Kwok (University of Sydney)

Discussant: Shiqi Ye (Chinese Academy of Sciences)

Double-Polling for Dynamic Tail Estimation

By Shiqi Ye* (Chinese Academy of Sciences) Discussant: Yi Ding (University of Macau)

15:15 - 15:45 Afternoon Tea

15:45 – 17:15 Session 8 (Chair: Alicia Rambaldi, University of Queensland)

Selection and Heterogeneity in the Returns to Migration

By Emilia Tjernström (Macquarie University) Discussant: Wei Wei (Monash University)

Inequality and consumption variability

By Josh Merfeld (University of Queensland)

Discussant: Emilia Tjernström (Macquarie University)

Connected Trade Flows: How Trade Networks Endogenize Trade Costs and Amplify Pair-Specific Heterogeneity—A Spatial Econometric Approach

By Hanbat Jeong (Macquarie University)
Discussant: Tao Sun (University of Melbourne)

17:15 - 17:45 Award / Concluding

^{*} Presenters are eligible for the AE² Young Econometrician Awards.





List of Participants

Name	Institution	E-mail
Brendan K. Beare	University of Sydney	brendan.beare@sydney.edu.au
Marc Chan	University of Melbourne	marc.chan@unimelb.edu.au
Carsten Chong	Hong Kong University of Science and Technology	carstenchong@ust.hk
Yi Ding	University of Macau	yiding@um.edu.mo
Yue Fang	Chinese University of Hong Kong	fangyue@cuhk.edu.cn
Jiti Gao	Monash University	jiti.gao@monash.edu
Gilliane Angela De Gorostiza-Roudnitski	University of Sydney	gilliane.degorostiza@sydney.edu.au
Reza Hajargasht	Griffith University	r.hajargasht@griffith.edu.au
Hanbat Jeong	Macquarie University	hanbat.jeong@mq.edu.au
Ali Furkan Kalay	Macquarie University	alifurkan.kalay@mq.edu.au
Simon Kwok	University of Sydney	simon.kwok@sydney.edu.au
Seojeong Lee	Seoul National University	s.jay.lee@snu.ac.kr
Jung Hyub Lee	University of Tokyo	jhlee@e.u-tokyo.ac.jp
Yingying Li	Hong Kong University of Science and Technology	yyli@ust.hk
Degui Li	University of Macau	deguili@um.edu.mo
Ye Lu	University of Sydney	ye.lu1@sydney.edu.au
John McDermott	Motu Economic and Public Policy Research	john.mcdermott@motu.org.nz
Josh Merfeld	University of Queensland	j.merfeld@uq.edu.au
James Morley	University of Sydney	james.morley@sydney.edu.au
Timothy Neal	University of New South Wales	timothy.neal@unsw.edu.au
Fu Ouyang	University of Queensland	f.ouyang@uq.edu.au
Bin Peng	Monash University	bin.peng@monash.edu
Peter C.B. Phillips	University of Auckland/Yale/SMU	peter.phillips@yale.edu
Alicia Rambaldi	University of Queensland	a.rambaldi@uq.edu.au
Gayani Rathnayake	Monash University	gayani.rathnayake@monash.edu
Mathew Read	Reserve Bank of Australia	ReadM@rba.gov.au
John Romalis	Macquarie University	john.romalis@mq.edu.au
Won-Ki Seo	University of Sydney	won-ki.seo@sydney.edu.au
Eunkyu Seong	Seoul National University	uocup96@snu.ac.kr
Hanlin Shang	Macquarie University	hanlin.shang@mq.edu.au
Shuping Shi	Macquarie University	shuping.shi@mq.edu.au
Tao Sun	University of Melbourne	tssun@student.unimelb.edu.au
Sizhong Sun	James Cook University	sizhong.sun@jcu.edu.au
Firmin Doko	University of Adelaide	firmin.dokotchatoka@adelaide.edu.au
Tchatoka Xin Tian	Johns Hopkins University	xtian21@jh.edu





Emilia Tjernström Macquarie University Wei Wei Monash University Yue Wu Chinese Academy of Sciences Jiazhen Xu Macquarie University Thomas T. Yang Australian National University Wenying Yao University of Melbourne Shiqi Ye Chinese Academy of Sciences Chansik Yoon University of Adelaide

emilia.tjernstrom@mq.edu.au wei.wei2@monash.edu wuyue23@amss.ac.cn jiazhen.xu@mq.edu.au tao.yang@anu.edu.au w.yao@mbs.edu shiqi.ye.c@gmail.com chansik.yoon@princeton.edu

Acknowledgement

We acknowledge financial support from the Macquarie Business School, Australian and New Zealand Association of Econometricians, Reserve Bank of Australia, and Australian Research Council Discovery Project DP210100476 (Bin Peng, Wenying Yao and Joakim Westerlund).