

2019 NBER-NSF Time Series Conference Wednesday, August 14 - Thursday, August 15 LT6, 2/F, Yasumoto International Academic Park (YIA) The Chinese University of Hong Kong

## Wednesday, August 14

8:00 a.m. – 8:30 a.m. Registration (Continental Breakfast Provided)

8:30 a.m. – 8:45 a.m. Welcome and Opening Remarks

N.H. Chan 陳毅恆- Introduction to the Guest of Honor

Rocky Tuan 段崇智, Vice-Chancellor and President of The Chinese University of

Hong Kong

Session 1: Nonparametric and Semiparametric Methods

Chair: Richard Davis (Columbia University)

8:45 a.m. – 9:15 a.m. Ashesh Rambachan (Harvard University)

A Nonparametric Dynamic Causal Model for Macroeconometrics

9:15 a.m. – 9:45 a.m. Ching-Kang Ing 銀慶剛 (National Tsing Hua University)

On Model Selection for ARFIMA Processes without Constraints on Memory Parameters

9:45 a.m. – 10:15 a.m. Bernd Funovits (University of Helsinki)

Semi-Parametric Estimation of Multivariate Possibly Non-Causal and Possibly Non

Invertible Time Series Models

10:15 a.m. – 10:30 a.m. Coffee Break

Session 2: Network and Spatial Modeling

Chair: Xinyuan Song 宋心遠 (The Chinese University of Hong Kong)

10:30 a.m. – 11:00 a.m. Victor Solo (University of New South Wales)

The New Asymptotics of Neural Networks

11:00 a.m. – 11:30 a.m. Samuel Wong 黃寶誠 (The Chinese University of Hong Kong)

Statistical Inference for Preferential Attachment Networks

11:30 a.m. – 12:00 p.m. Katherine Ensor (Rice University)

Spatial Temporal Modeling of Rainfall Extremes

12:00 p.m. – 1:00 p.m. Lunch (Chung Chi Staff Canteen) (崇基教職員餐廳)

1:00 p.m. – 2:00 p.m. Poster Session 1 (2/F Oval Area, YIA)

Abdullah Alomar (Massachusetts Institute of Technology)

Adaptive Approach for Time Series Imputation Using Matrix Estimation Methods

Jing Cheng 程璟 (Huaqiao University)

Efficient Inference for Nonlinear State Space Models: an Automatic Sample Size Selection Rule

Gudmundur Gudmundsson (Aarhus University)

Community Detection in Large Vector Autoregressions

Arpita Mukherjee (Rutgers University)

Forecast Accuracy Vs Trading Profitability: The Case of Nonparametric Volatility Estimators

Evan Munro (Stanford University)

Dynamic Hierarchical Latent Variable Models for Categorical Survey Data

David Rapach (Saint Louis University)

Estimating Risk Premia in DSGE Models with Stochastic Volatility

Jonathan Reeves (University of New South Wales)

Beta Measurement and Forecasting with High Frequency Returns

Hiroshi Shiraishi (Keio University)

Local Asymptotic Normality and Efficient Estimation for Multivariate GINAR(p) Models

Di Wang 王迪 (University of Hong Kong)

High Dimensional Matrix Autoregressive Model

Yohei Yamamoto (Hitotsubashi University)

Testing Jointly for Structural Changes in The Error Variance and Coefficients of a Linear Regression Model

Yingying Zhang (East China Normal University)

Single-index Thresholding in Quantile Regression

Session 3: Change-Point and Structural Break

Chair: Kin Wai Chan 陳健威 (The Chinese University of Hong Kong)

2:00 p.m. — 2:30 p.m. Chun Yip Yau 邱俊業 (The Chinese University of Hong Kong)

Optimal Estimation for Change-Point in Time Series

2:30 p.m. – 3:00 p.m. Yongmiao Hong 洪永淼 (Cornell University)

Consistent Testing for Structural Changes in Time Series Models via Discrete Fourier

Transform

3:00 p.m. – 3:30 p.m. Oreste Tristani (European Central Bank)

Modelling Yields at The Lower Bound through Regime Shifts

3:30 p.m. – 3:45 p.m. Coffee Break

Session 4: Unit Root and Cointegration

Chair: Wai Keung Li 李偉強 (The Education University of Hong Kong)

3:45 p.m. – 4:15 p.m. Rongmao Zhang 張榮茂 (Zhejiang University)

Cointegration Rank Estimation for High-dimensional Time Series with Breaks

4:15 p.m. – 4:45 p.m. Junichi Hirukawa (Niigata University)

Asymptotic Properties of Mildly Explosive Processes with Locally Stationary

Disturbance

Brendan Beare (University of California, San Diego) 4:45 p.m. – 5:15 p.m.

Representation of I(1) And I(2) Autoregressive Hilbertian Processes

5:15 p.m. - 6:15 p.m.Poster Session 2 (2/F Oval Area, YIA)

Martín Almuzara Salvador (Center for Monetary and Financial Studies)

U.S. Aggregate Output Measurement: A Common Trend Approach

Liyu Dou (Princeton University)

Optimal HAR Inference

Wai Keung Li 李偉強 (The Education University of Hong Kong))

Unit Root Testing for the Buffered Autoregressive Model

Zhixiang Lin 林志翔 (The Chinese University of Hong Kong)

Model-Based Approach to the Joint Analysis of Single-Cell Data on Chromatin

Accessibility and Gene Expression

Luca Nocciola (Deutsche Bundesbank)

Finite Sample Forecast Properties and Window Length Under Breaks in Cointegrated

**Systems** 

Henghsiu Tsai 蔡恆修 (Academia Sinica)

Non-Parametric Estimation of Conditional Tail Expectation for Long-Horizon Returns

Man Wang 王滿 (Donghua University)

MOSUM-Based Test and Estimation Method for Multiple Changes in Panel Data

Junho Yang (Texas A&M University)

Feature Estimation and Testing for Linear Regression with Time Series Regressors

6:45 p.m. Dinner (Lei Garden 利苑酒家, Shop 628-631, 6/F, New Town Plaza Phase 1, Shatin)

## Thursday, August 15

8:30 a.m. - 9:00 a.m.Continental Breakfast

Session 5: Dynamic Econometrics Models

Chair: Phillip Yam 任尚智 (The Chinese University of Hong Kong)

9:00 a.m. – 9:30 a.m. Rui Huang 黃鋭(University of Iowa)

Sparse Causal Dynamic Linear Regression

9:30 a.m. - 10:00 a.m. Alessandra Luati (University of Bologna)

Semiparametric Modeling of Multiple Quantiles

10:00 a.m. - 10:30 a.m. Zhentao Shi 史震濤 (The Chinese University of Hong Kong)

Boosting the Hodrick-Prescott Filter

10:30 a.m. – 10:45 a.m. Coffee Break

Session 6: Panel Data and Time Series

Chair: Victor Solo (University of New South Wales)

10:45 a.m. – 11:15 a.m. Tomohiro Ando (University of Melbourne)

A Spatial Panel Quantile Model with Unobserved Heterogeneity

11:15 a.m. – 11:45 a.m. Takashi Yamagata (Osaka University/University of York)

Estimation of Weak Factor Models

11:45 a.m. – 12:15 p.m. Meihui Guo 郭美惠 (National Sun Yat-sen University)

Time Series Analysis with Unsupervised Learning

12:15 p.m. – 1:15 p.m. Lunch (Chung Chi Staff Canteen) (崇基教職員餐廳)

1:15 p.m. – 2:15 p.m. Poster Session 3 (2/F Oval Area, YIA)

Yaein Baek (University of California, San Diego)

Estimation of Structural Break Point in Linear Regression Models

Peter Bossaerts (University of Melbourne)

Distributional Temporal Difference Learning for Finance: Dealing with Leptokurtic

Rewards

Guanhao Feng 馮冠豪 (City University of Hong Kong)

Factor Investing: Hierarchical Ensemble Learning

Xu Han 韓旭 (City University of Hong Kong)

Instrumental Variable Estimation of Structural VAR Models Robust to Possible Non-

Stationarity

Yuefeng Han (University of Chicago)

Robust Estimation of High Dimensional Generalized Linear Models for Temporal

Dependent Data

Xuexin Wang 王學新 (Xiamen University)

An Asymptotic F Test for Uncorrelatedness in the Presence of Time Series Dependence

Yang Zu (University of Nottingham)

Nonparametric Estimation of the Variance Function in an Explosive Autoregression

Model

Session 7: Volatility Modeling

Chair: Xu Han 韓旭 (City University of Hong Kong)

2:15 p.m. – 2:45 p.m. Jean-Marie Dufour (McGill University)

Simple Estimators for Higher-Order Stochastic Volatility Models and Forecasting

2:45 p.m. – 3:15 p.m. Paolo Santucci de Magistris (LUISS University and CREATES)

When the Going Gets Tough: Extreme Overdispersion and Persistence in Time Series of

Counts

3:15 p.m. – 3:45 p.m. Deniz Erdemlioglu (IESEG School of Management)

Testing for Intensity Jumps Conditional on Information Arrivals

3:45 p.m. – 4:00 p.m. Coffee Break

Session 8: High Dimensional Models

Chair: Tony Sit 薛賢鴻 (The Chinese University of Hong Kong)

4:00 p.m. – 4:30 p.m. Dacheng Xiu (University of Chicago)

Thousands of Alpha Tests

4:30 p.m. — 5:00 p.m. Shiqing Ling 凌仕卿 (Hong Kong University of Science and Technology)

Automated Estimation of Heavy-Tailed Vector Error Correction Models

5:00 p.m. – 5:30 p.m. Ke Zhu 朱柯 (The University of Hong Kong)

Testing and Modelling for The Structural Change in Matrix Time Series

5:30 p.m. Closing Remarks