

Cathy W. S. Chen, Ph.D., CStat.

Curriculum Vita

Address Department of Statistics,
Feng Chia University
No 100, Wenhua Road, Taichung 407102,
Taiwan

Email chenws@mail.fcu.edu.tw
dr.cwschen@gmail.com

Tel (Office) +886 4 2451 7250 ext 4412
(Cell phone) +886 953 531 288

Webpage <https://sites.google.com/view/cwschen/home>



 <https://orcid.org/0000-0001-8727-8168>

[View my homepage](#), [View Google Scholar](#), [View my ORCID](#), [View Scopus Author](#)

Academic Qualifications

1993/1 Ph.D. in Statistics, National Central University, Chung-Li, Taiwan.
1991/8 - 1992/7 Visiting Ph. D. student, Graduate School of Business, University of Chicago, USA.
1985/12 M.Sc. in Statistics, University of California, Riverside, USA

Academic Positions

2004/8 - present Distinguished Professor, Feng Chia University
2018/4 – 2020/1 Associate Dean, International School Technology & Management, Feng Chia University
2016/4 – 2018/7 Director, FCU-SJSU Degree Program in Business Analytics, Feng Chia University
2005/8 – 2008/7 Department Head and Director of Institute, Department of Statistics / Graduate Institute of Statistics & Actuarial Science / Graduate Institute of Applied Statistics, Feng Chia University
2006/2 – 2013/7 Adjunct Chair Professor, College of Finance and Economics, Ling Tung University, Taichung, Taiwan.
2007/8 - present Adjunct Professor, Faculty of Economics, Chiang Mai University, Chiang Mai, Thailand.
1998/8 - present Feng Chia University, Professor
2000/8 – 2002/7 Department Head and Director of Institute, Department of Statistics / Graduate Institute of Statistics & Actuarial Science, Feng Chia University
1993/2 – 1998/7 Feng Chia University, Associate Professor

Visiting Positions

8.4.2023-8.8.2023	Visiting Professor, Hitotsubashi University, Japan (Funded by NSTC)
3.31.2023-4.9.2023	Visiting Professor, Hitotsubashi University, Japan (Funded by NSTC)
1.5.2016-1.14.2016	Visiting Professor, Faculty of Economics, Chiang Mai University, Thailand (Funded by Chiang Mai University)
7.14.2015-7.25.2015	Visiting Professor, Faculty of Economics, Chiang Mai University, Thailand (Funded by Chiang Mai University)
12.3.2014-12.16.2014	Visiting Professor, Faculty of Economics, Chiang Mai University, Thailand (Funded by Chiang Mai University)
2.23.2014-2.28.2014	Visiting Professor, School of Economics & Wang Yanan Institute for Studies in Economics (WISE) Xiamen University, China (Funded by Xiamen University)
1.21.2014-1.25.2014	Visiting Professor, Institute of Economic Research, Hitotsubashi University, Japan (Funded by Hitotsubashi University)
1.19.2013 - 2.2.2013	Visiting Professor, Discipline of Business Analytics, University of Sydney, Australia. (Funded by NSC)
8.14.2012-8.19.2012	Visiting Professor, Department of Statistics, Seoul National University, Korea. (Funded by SNU)
2.1.2010-2.6.2010	Visiting Professor, Department of Economics, University of Tokyo, Japan. (Funded by University of Tokyo)
8.11.2009-8.20.2009	Visiting Professor, Discipline of Operations Management and Econometrics, University of Sydney, Australia. (Funded by University of Sydney)
8.9.2008 - 8.17.2008	Visiting Professor, Faculty of Economics, Chiang Mai University, Thailand (Funded by Chiang Mai University)
1.21.2008 - 2.5.2008	Visiting Professor, Discipline of Econometrics and Business Statistics, University of Sydney, Australia. (Funded by University of Sydney)
1.11.2008 -1.16.2008	Visiting Professor, Faculty of Economics, Chiang Mai University, Thailand (Funded by Chiang Mai University)
2006/7 – 2007/1	Visiting Professor, the Discipline of Econometrics and Business Statistics, University of Sydney, Australia. (Visit funded by University of Sydney, to teach a course on Forecasting for Economics and Business)
2002/8 – 2002/12	Visiting scholar, Department of Economics, University of California, San Diego, USA. (Funded by NSC)
3.30.2002 –4.6.2002	Visiting professor, Department of Statistics and Actuarial Science, University of Hong Kong, HK (Funded by University of Hong Kong and Taipei Trade Centre Exchange Scheme 2001)
4.1.2001-4.8.2001	Visiting scholar, Graduate School of Business, University of Chicago, USA. (Funded by NSC)
11.23.2000-11.28.2000	Visiting scholar, Department of Information and Systems Management, the Hong Kong University of Science & Technology, HK (Funded by UST)

3.4.1998-4.10.1998	Visiting scholar, Graduate School of Business, University of Chicago, USA. (Funded by NSC)
1997/8 – 1998/2	Visiting scholar, University of Oxford, UK (Funded by NSC)
1996/8	Visiting scholar, Department of Mathematics, University of Memphis, USA
1991/8 – 1992/7	Visiting Ph.D. student, Graduate School of Business, University of Chicago, USA. (Funded by Ministry of Education, ROC)

Professional Qualifications

1. Fellow, the International Society for Bayesian Analysis (ISBA) 2020 -
2. Fellow, the American Statistical Association (ASA) 2016 -
3. Fellow, the Royal Statistical Society, UK 2009 -
4. Chartered Statistician, the Royal Statistical Society, UK, (Designation: CStat.) 2010 –
5. Elected Member, International Statistical Institute (ISI) 2008-

Honors and Awards

1. Outstanding Research Award for the 111 Academic Year, National Science and Technology Council, Taiwan. (2023/2)
2. The most downloaded articles from The North American Journal of Economics and Finance in the last 90 days (2020/3) - Chen, Dong, Liu, and Sriboonchitta (2019)
3. Feng Chia University Faculty Research Publication Awards (1995 – now)
4. Fellow, the International Society for Bayesian Analysis (ISBA). 2020
5. Fellow, the American Statistical Association (ASA). 2016
6. Fellow, the Royal Statistical Society (RSS), UK. 2009
7. Elected Member, International Statistical Institute (ISI). 2008
8. Phi Tau Phi Scholastic Honor Society. 2006
9. Distinguished Professor of Feng Chia University, 2004/8 - present
10. Listed in "Who's Who in Science and Engineering", 2003, Marquis
11. Awarded research grant, Academic Links Collaboration & Research of the University of Hong Kong and Taipei Trade Centre Exchange Scheme 2001
12. National Science Council Research Awards (1995/8 – 2000/7, discontinued after year 2000)
13. Feng Chia University Excellence in Teaching Award (1996/11)
14. National Science Council Young Research Awards (1993/4 – 1994/7)
15. Ministry of Education Scholarship for Ph.D. candidates studying abroad, Ministry of Education, Taiwan, 1991/9 – 1992/9.
16. Statistics Scholarship, Directorate-General of Budget, Accounting, and Statistics, Executive Yuan, Taiwan, 1989

Research Interests

Time series analysis; Bayesian MCMC methods; Forecasting; Statistical computing; Financial Econometrics; Statistical methods in epidemiology.

Editorial Activities

Current editorial activities

Editor:

[Editor, *Computational Statistics*](#) (SCI, 2021 -)

Journal of Economics and Management (EconLit, 2004 -2021)

Associate Editor

- Academic Editor, [PLOS ONE](#) (SCI, 2014 -)
- [Associate Editor, The Australian and New Zealand Journal of Statistics](#) (SCI, 2008 -)
- [Associate Editor, Entropy](#) (SCI, 2020 -2023)
- [Associate Editor, Japanese Journal of Statistics and Data Science](#) (2017 -)

Past editorial activities**Associate Editor**

- [Associate Editor, Computational Statistics](#) (SCI, 2008 -2020)
- [Associate Editor, Journal of Business & Economic Statistics](#) (JBES) (SCI/SSCI, 2013 – 2018)
- [Associate Editor, Computational Statistics & Data Analysis](#) (CSDA) (SCI, 2009 – 2016)
- [Associate Editor, Journal of the Chinese Statistical Association](#) (EconLit, 2006 – 2010, 2012-2016)

Guest Editor/Associate Editor

- Annals Guest Associate Editor, CSDA Annals of Computational and Financial Econometrics, 2010.
- Editor, the 6th special issue on Computational Econometrics of the *Computational Statistics & Data Analysis*.
- Editor, the special issue on “Bayesian Computing, Methods and Applications” of the *Computational Statistics & Data Analysis*.

Service to External Academic Organizations and conferences

- Chair, East Asia Outreach Committee (EAOC), ISI, August 2011 – December 2021.
- Committee member of the ISI Membership Election Committee, 2017- 2022.
- Board of Directors, ISBA (International Society for Bayesian Analysis), 2021-2023
- Chair, the Eastern Asia chapter of ISBA (2021 - 2022)
- Chair-elect, the Eastern Asia chapter of ISBA (2019 - 2020)
- American Students Selection Committee, Fulbright Taiwan (Foundation for Scholarly Exchange) for 2019-2020 American Fulbright Fellow awards
- Program Committee member, the 12th Annual Meeting of the Society for Financial Econometrics (SoFiE), Shanghai, China, June 12-14, 2019.
- Program Committee member, the 11th Annual Meeting of the Society for Financial Econometrics (SoFiE), Lugano, Switzerland, June 12-14, 2018.
- Kouchi International Symposium: Recent Developments of Quantile Methods, Causality and High Dim Statistics, invited speaker, March 3-5, 2018, Kouchi, Japan.
- Kagawa International Symposium: Theme: Recent Developments in Statistics and Econometrics, invited speaker and session chair, March 1-3, 2018, Kagawa, Japan.
- Waseda International Symposium 2018: Recent developments in Time Series Analysis: Quantile Regression, High Dimensional Data & Causality, invited speaker and session chair, February 26-28, 2018, Tokyo, Japan.
- Workshops on Financial/Economic Analytics, invited speaker, March 8-9, 2018, The Hang Seng University of Hong Kong.
- Savage Award Committee, ISBA, 2016, 2017/10-2018/3.

- SPC (Scientific Program Committee), the 2nd International Society for Bayesian Analysis – East Asia Chapter (ISBA-EAC) Conference, Changchun, Jilin, July 6 – 7, 2017.
- SPC, the First Eastern Asia Meeting on Bayesian Statistics, (A Satellite Meeting of the 10th ICSA International Conference), Shanghai Jiao Tong University, Shanghai, China, December 18, 2016.
- SPC, the 10th World Conference of the International Society for Bayesian Analysis (ISBA), June 13-17, 2016, Sardinia, Italy.
- International Society of Bayesian Analysis (ISBA) World Meeting 2016, invited speaker, June 13-17, 2016, Sardinia, Italy.
- SPC, the 9th Conference of the Asian Regional Section of the IASC (IASC-ARS 2015), December 17-19, 2015, Singapore.
- SPC, the 8th International conference on Computational and Financial Econometrics (CFE 2012), December 6-8, 2014, Pisa, Italy.
- Council member, International Association for Statistical Computing (IASC), ISI, 2013-2017.
- Committee member, Women in Statistics, ISI, 2013-2017
- International Society for Bayesian Analysis (ISBA) / Economics, Finance and Business (EFaB), Nominating Committee 2013.
- ISI Nominations Committee for the period 2013-2015.
- Board of Directors of the IASC-ARS (The Asian Regional Section of the International Association for Statistical Computing), 2008 – 2017.
- Panel member, Mathematics Research Promotion Center of the National Science Council in Taiwan. 01.01.2013-12.31.2015
- Panel member (reviewing, evaluation, and funding research projects) in statistics, Department of Natural Sciences of the National Science Council in Taiwan from 1.1.2011 to 12.31.2013.
- Panel member, Mathematics Research Promotion Center of the National Science Council in Taiwan. 01.01.2007-12.31.2009
- Executive council member, the Chinese Statistical Association, Taiwan, 2012-2016.
- External Examiner for Ph. D. thesis entitled “Some Topics in Co-integration and Buffered models” (Renjie LU), Department of Statistics and Actuarial Science, The University of Hong Kong, Hong Kong, 1.2018.

External Examiner for Ph. D. thesis

- External Examiner for Ph. D. thesis entitled “Bayesian Parametric Financial Risk Forecasting Employing Multiple High-Frequency Realized Measures” (Vica TENDENAN), University of Sydney, Australia, March, 2023.
- External Examiner for Ph. D. thesis entitled “Statistical issues in trading and risk management: Innovations and Application” (Ka Fai LAW), University of Hong Kong, China, 12.2019.
- External Examiner for Ph. D. thesis entitled “Estimation and Forecasting of Covariance Matrices with Applications to Financial Risk Management” (Ka Wai TING), University of Hong Kong, China, 7.2019.
- External Examiner for Ph. D. thesis entitled “Essays on Financial Modeling and Forecasting” (Hong Wang), Monash University, Australia, 11.2018.
- External Examiner for Ph. D. thesis entitled “Some Topics in Co-integration and Buffered models” (Renjie LU), University of Hong Kong, China, 6.2018.

- External Examiner for Ph. D. thesis entitled “The Development of A Clinical Decision Making Framework for Image Guided Radiotherapy” (Catriona Elizabeth M Hargrave), School of Statistical Science & Operational Research, Queensland University of Technology, Australia, 1.2018.
- External Examiner for Ph. D. thesis entitled “Advancement of Autoregressive Conditional Duration Models Involving Liquidity and Price Dynamics” (T.M. Rasika Pushpamali Yatigamma), Discipline of Business Analytics, University of Sydney, Australia, 12.2015.
- External Examiner for Ph. D. dissertation entitled “Bayesian Analysis of Stochastic Volatility Models: Modelling and Application”. (Joanna Wang), School of Mathematics and Statistics, the University of Sydney, Australia. 11.2011.
- External Examiner for Ph. D. dissertation entitled “Bayesian Methods for Estimation, Inference and Forecasting of Flexible Models for Value-at-Risk and Tail Conditional Expectations”. (Qian Chen), University of Sydney, Australia. 2011
- External Examiner for Ph. D. dissertation entitled “Nonlinear Time Series Modeling with Application to Finance and Other Fields”. (Shusong Jin), Department Statistics and Actuarial Science, University of Hong Kong, Hong Kong. 6.2005.
- External Examiner for Ph. D. dissertation entitled “Estimating, Diagnosing And Comparing Time Series Models” (Richard Gerlach), University of New South Wales, Australia. 2000.
- Adjunct Professor and workshop speaker, School of Economics, Chiang Mai University, Chiang Mai, Thailand.

(Visit funded by Chiang Mai University, to teach a Ph.D. course on Selected Topic in Advanced Econometrics: Bayesian Time Series Econometrics Markov chain Monte Carlo Estimation)

- Visiting Professor, the Discipline of Econometrics and Business Statistics, University of Sydney, Australia. (Visit funded by University of Sydney, to teach a course on Forecasting for Economics and Business)
- SPC (Scientific Program Committee), Joint Meeting of the IASC Satellite Conference for the 59th ISI WSC and the 8th Asian Regional Section (ARS) of the IASC, August 22-23, 2013, Seoul, Korea.
- SPC, ISI Young Statisticians' Meeting, August 23-24, 2013, Hong Kong.
- SPC, the 6th International conference on Computational and Financial Econometrics (CFE 2012), December 1-3, 2012, Oviedo, Spain.
- SPC, the 20th International Conference on Computational Statistics (COMPSTAT 2012), August 27-31, 2012, Limassol, Cyprus.
- SPC, Joint Meeting of the 2011 Taipei International Statistical Symposium and 7th Conference of the Asian Regional Section of the IASC, December 16-19, 2011, Taipei, Taiwan.
- Conference Chair, International Workshop on Statistical Computing in Quantitative Finance and Biostatistics: A Satellite Meeting for the Asian Regional Section of the IASC, December 20-21, 2011, Taichung, Taiwan.
- SPC, the 5th International conference on Computational and Financial Econometrics (CFE'11), December 17-19, 2011, London, UK.
- SPC, the 4th International Conference on Computational and Financial Econometrics (CFE'10), December 10-12, 2010, London, UK.
- SPC, Empirical Likelihood Method and Its Application to Theory of Classification, December 2-5, 2011, Wakayama University, Wakayama, Japan.
- SPC, the 10th World Conference of the ISBA, June 3-8, 2010, Italy.

- SPC, the 10th World Conference of the International Society for Bayesian Analysis (ISBA), June 3-8, 2010, Valencia, Spain.
- SPC, the third Meeting of the Econometric Society of Thailand, January 7-8, 2010, Chiang Mai University, Thailand.
- SPC, and session organizer, Computational and Financial Econometrics (CFE09), October 29-31, 2009, Limassol, Cyprus.
- Organizer, the 29th Annual International Symposium on Forecasting (ISF) 2009 June 21-24, 2009, Hong Kong.
- SPC, the Joint Meeting of 4th World Conference of the IASC and 6th Conference of the Asian Regional Section of the IASC on Computational Statistics & Data Analysis, December 5-8, 2008, Yokohama, Japan.
- SPC, Computational and Financial Econometrics (CFE08), June 19-21, 2008, Neuchâtel, Switzerland.
- SPC, the 9th International Society for Bayesian Analysis (ISBA) World Meeting, July 21-25, 2008, Hamilton Island, Australia.
- SPC, the Joint Meeting of 4th World Conference of the IASC and 6th Conference of the Asian Regional Section of the IASC on Computational Statistics & Data Analysis, December 5-8, 2008, Yokohama, Japan.

Supervision

1. I have supervised eight PhD students.
2. I have supervised 55 master students.

	Ph.D. Students	Thesis
1	Liu, F. C.	Volatility Forecasting and Model Selection for Nonlinear Time Series. (2009/12)
2	Lin, E. M. H.	Bayesian Forecasting and Nonlinear Dynamic Models (2010/8)
3	Chen, S. Y.	Bayesian Unit Root Tests of Nonlinear Time Series Models with Heteroskedasticity (2013/6)
4	Truong, B. C.	Bayesian Inference and Model Selection for Double Hysteretic Heteroskedastic Models (2016/7)
5	Dong, M. C.	Essays of Structural Changes and Quantile Regression on Financial Data (2019/7)
6	Than-Thi, H.	Bayesian Inference and Quantile Forecasting on the Multivariate Hysteretic Autoregressive Model (2019/8)
7	Khamthong, K.	Bayesian Modeling for Nonlinear Time Series of Counts (2019/8)
8	Pingal, A. C.	Bayesian Modeling of Integer-Valued Time Series via Transfer Function Models (2023/1)

3. I have supervised the following Postdoctoral students Liu, F.C. and Lin, E.M.H. and Dong, M.C.

Postdoctoral students

- Liu, Feng Chi, NSC grant (NSC 99-2118-M-035 -001 -MY2), 8.1.2011- 7.31.2011

- Lin, Edward M. H. NSC grant (NSC 99-2118-M-035 -001 –MY2), 10.1.2011 - 7.31.2012
- Dong, M.C. MOST grant (MOST108-2811-M-035-500) 10.1.2019 - 7.31.2020

Journal Articles and Book Sections

“*”: Corresponding author

____: indicates supervised MSc, PhD or Postdoc

2023

1. **Chen***, **C.W.S.**, Watanabe, T., and E.M.H. Lin (10/2023) Bayesian estimation of realized GARCH-type models with application to financial tail risk management, *Econometrics and Statistics*, <https://doi.org/10.1016/j.ecosta.2021.03.006>, **28**, 30-46. [MOST 109-2118-M-035-005-MY3] (2021 SCIE Statistics & Probability, IF 1.9)
2. **Chen***, **C.W.S.**, Chen, C.S., and Hsiung, M.H. (8/2023) Bayesian modeling of spatial integer-valued time series, *Computational Statistics & Data Analysis*, **188**, 107827. [MOST 109-2118-M-035-005-MY3] (2021 SCI Statistics & Probability, IF 2.035)
3. Wang, K.Y.K., **Chen***, **C.W.S.**, and So, M.K.P. (2/2023) Quantile three-factor model with heteroskedasticity, skewness, and leptokurtosis, *Computational Statistics & Data Analysis*, **182**, 107702. [MOST 109-2118-M-035-005-MY3] (2021 SCI Statistics & Probability, IF 2.035)
4. **Chen***, **C.W.S.**, Liu, F.C., Pingal, A.C. (Ph.D. st) (1/2023) Integer-valued transfer function models for counts that show zero inflation, *Statistics and Probability Letters*, **19**, 109701. [MOST 109-2118-M-035-005-MY3] (2020 SCI Statistics & Probability, IF 0.870)
5. **Chen***, **C.W.S.**, Hsu, H.Y., and Watanabe, T. (1/2023) Tail risk forecasting of realized volatility CAViaR models, *Finance Research Letters*, **51**, 103326. [MOST 109-2118-M-035-005-MY3] (2021 SSCI Business, Finance Rank, 1/111, IF 9.848)
6. Dong, M.C. (Ph.D. st), **Chen***, **C.W.S.**, and Asai, M. (1/2023) Bayesian non-linear quantile effects on modelling realized kernels, *International Journal of Finance and Economics*, **28**, 981-995. <https://doi.org/10.1002/ijfe.2459> [MOST 107-2118-M-035-005-MY2, MOST 109-2118-M-035-005-MY3] (2020 SSCI Business, Finance, IF 3.070)

2022

7. So, M.K.P. and **Chen***, **C.W.S.** (11/2022) Discussion of “Multivariate Dynamic Modeling for Bayesian Forecasting of Business Revenue”. *Applied Stochastic Models in Business and Industry*, <https://doi.org/10.1002/asmb.2725>. [MOST 109-2118-M-035-005-MY3] (2021 SCI Statistics & Probability, IF 1.497)
8. **Chen***, **C.W.S.**, Lin, E.M.H., and Huang, T.F.J. (10/2022) Bayesian quantile forecasting via the realized hysteretic GARCH model, *Journal of Forecasting*, **41**, 1317-1337. [MOST 109-2118-M-035-005-MY3] (2021 SSCI Management, Economics, IF 2.627)
9. **Chen***, **C.W.S.**, So, M.K.P., and Liu, F.C. (8/2022) Assessing government policies' impact on the COVID-19 pandemic and elderly deaths in East Asia, *Epidemiology and Infection*, **150**, E161, <https://doi.org/10.1017/S0950268822001388> [MOST 109-2118-M-035-005-MY3] (2021 SCI

Infectious Diseases, Public, Environmental & Occupational Health, IF 4.434)

10. **Chen***, **C.W.S.** and Fan, T.H. (3/2022) Public opinion concerning governments' response to the COVID-19 pandemic, *PLoS ONE*, 17(3): e0260062. <https://doi.org/10.1371/journal.pone.0260062>. [MOST 109-2118-M-035-005-MY3] (2021 SCI Multidisciplinary Sciences, IF 3.752)
11. Pingal, A.C. (Ph.D. st) and **Chen***, **C.W.S.** (3/2022) Bayesian modelling of integer-valued transfer function models, *Statistical Modelling*, <https://doi.org/10.1177/1471082X221075477> [MOST 109-2118-M-035-005-MY3] (2020 SCI Statistics & Probability, IF 2.039)

2021

12. **Chen***, **C.W.S.** and Chiu, L.M. (9/2021) Ordinal time series forecasting of the air quality index, *Entropy*, 23, 1167. <https://doi.org/10.3390/e23091167> [MOST 109-2118-M-035-005-MY3] (2021 SCI Physics, Multidisciplinary IF 2.738)
13. **Chen***, **C.W.S.** and Lee, B. (9/2021) Bayesian inference of multiple structural change models with asymmetric GARCH errors, *Statistical Methods and Applications*, **30**, 1053–1078. [MOST 107-2118-M-035-005-MY2.] (2020 SCI Statistics & Probability, IF 1.314)
14. **Chen***, **C.W.S.**, Than-Thi, H. (Ph.D. st), and Asai, M. (8/2021) On a bivariate hysteretic autoregressive model with conditional asymmetry in correlations, *Computational Economics*, **58**, 413–433. [MOST 107-2118-M-035-005-MY2] (2020 SSCI Economics, Management, IF 1.876)
15. **Chen***, **C.W.S.**, Lee, S., Dong, M.C. (Postdoc), and Taniguchi, M. (1/2021) What factors drive the satisfaction of citizens on governments' responses to COVID-19? *International Journal of Infectious Diseases*, **102**, 327-331. [MOST109-2118-M-035-005-MY3] (2021 SCI Infectious Diseases, IF 12.073)
16. Lin, T.Y., **Chen***, **C.W.S.**, and Syu, F.Y. (1/2021) Multi-asset pair-trading strategy: A statistical learning approach, *North American Journal of Economics and Finance*, **55**, 101295. [MOST 107-2118-M-035-005-MY2.] (2021 SSCI Business, Finance, Economics, IF 3.136).
17. **Chen***, **C.W.S.**, Lee, S., and Khamthong, K. (Ph.D. st) (1/2021) Bayesian inference of nonlinear hysteretic integer-valued GARCH models for disease counts, *Computational Statistics*, **36**, 261-281. [MOST 107-2118-M-035-005-MY2] (2021 SCI Statistics & Probability, IF 1.405)

2020

18. **Chen***, **C.W.S.** and Khamthong, K. (Ph.D. st) (12/2020) Bayesian modelling of nonlinear negative binomial integer-valued GARCHX models, *Statistical Modelling*, **20**, 537-561. [MOST 107-2118-M-035-005-MY2] (2020 SCI Statistics & Probability, IF 2.039)
19. Xu, X. (Ph.D. st), Chen, Y., **Chen***, **C.W.S.**, Lin, X. (Ph.D. st) (9/2020) Adaptive log-linear zero-inflated generalized Poisson autoregressive model with applications to crime counts, *Annals of Applied Statistics*, **14**, 1493-1515. [MOST 107-2118-M-035-005-MY2] (2020 SCI Statistics & Probability, IF 2.083)

2019

20. **Chen***, **C.W.S.**, Than-Thi, H. (Ph.D. st), So, M.K.P., and Sriboonchitta, S. (12/2019) Quantile forecasting based on a bivariate hysteretic autoregressive model with GARCH errors and time-varying

- correlations, *Applied Stochastic Models in Business and Industry*, **35**, 1301-1321. [MOST 107-2118-M-035-005-MY2] (2021 SCI Statistics & Probability, IF 1.497)
21. **Chen***, **C.W.S.**, Dong, M.C. (Ph.D. st), Liu, N., and Sriboonchitta, S. (11/2019) Inferences of default risk and borrower characteristics on P2P lending, *North American Journal of Economics and Finance*, **50**, 101013. [MOST 107-2118-M-035-005-MY2] (2021 SSCI Business, Finance, Economics, IF 3.136).
 22. **Chen***, **C.W.S.**, Khamthong, K. (Ph.D. st), and Lee, S. (8/2019) Markov switching integer-valued generalized auto-regressive conditional heteroscedastic models for dengue counts, *Journal of the Royal Statistical Society Series C – Applied Statistics*, **68**, 963–983. [MOST 107-2118-M-035-005-MY2] (2020 SCI Statistics & Probability, IF 1.864)
 23. **Chen***, **C.W.S.** and Watanabe, T. (5/2019) Bayesian modeling and forecasting of Value-at-Risk via threshold realized volatility, *Applied Stochastic Models in Business and Industry*, **35**, 747-765. [MOST 104-2410-H-035-004, MOST 105-2118-M-035-003-MY2] (2021 SCI Statistics & Probability, IF 1.497)
 24. **Chen***, **C.W.S.**, Lin, T.Y., Huang, T.Y. (3/2019) Incorporating volatility in tolerance intervals for pair-trading strategy and backtesting, *Journal of Risk Model Validation*, **13**, 63–94. [MOST 105-2118-M-035-003-MY2] (2019 SSCI Business, Finance, IF 0.412).
 25. Dong, M.C. (Ph.D. st), **Chen***, **C.W.S.**, Lee, S., and Sriboonchitta, S. (1/2019) How Strong is the Relationship among Gold and USD Exchange Rates? Analytics based on Structural Change Models, *Computational Economics*, **53**, 343-366. [MOST 104-2410-H-035-004 and MOST 105-2118-M-035-003-MY2] (2020 SSCI Economics, Management, IF 1.876)
 26. **Chen***, **C.W.S.**, Than-Thi, H. (Ph.D. st), and So, M.K.P. (1/2019) On hysteretic vector autoregressive model with applications, *Journal of Statistical Computation and Simulation*, **89**, 191-210. [MOST 105-2118-M-035-003-MY2] (2020 SCI Statistics & Probability, IF 1.424)
 27. Than-Thi, H. (Ph.D. st), Dong, M.C. (Ph.D. st), **Chen***, **C.W.S.** (1/2019) Bayesian modelling structural changes on housing price dynamics, In Kreinovich V., Sriboonchitta S. (eds.) *Structural Changes and their Econometric Modeling*, Studies in Computational Intelligence, **808**, 83-104. [MOST 107-2118-M-035-005-MY2]

2018

28. **Chen***, **C.W.S.**, Cheng, M.C., and Sriboonchitta, S. (6/2018) Predictive analytics of Taiwan inbound tourism from ASEAN 5, *International Journal of Tourism Sciences*, **18**, 124–138. [MOST 105-2118-M-035-003-MY2]
29. Dong, M.C. (Ph.D. st), Tian, S., and **Chen***, **C.W.S.** (3/2018) Predicting failure risk using financial ratios: Quantile hazard model approach, *North American Journal of Economics and Finance*, **44**, 204-220. <https://doi.org/10.1016/j.najef.2018.01.005>. [MOST 105-2118-M-035-003-MY2] (2021 SSCI Business, Finance, Economics, IF 3.136).
30. **Chen, C.W.S.**, Hsieh, Y.H., Su, H.C., and Wu, J.J. (2/2018) Causality test of ambient fine particles and human influenza in Taiwan: Age group-specific disparity and geographic heterogeneity, *Environment International*, **111**, 354-361. [MOST 105-2118-M-035-003-MY2] (2021 SCI Environmental Sciences 16/279, IF 13.352)
31. **Chen***, **C.W.S.** and Sun, Y.W. (1/2018) Bayesian Forecasting for Tail Risk, in V. Kreinovich et al. (eds.),

Predictive Econometrics and Big Data, *Studies in Computational Intelligence* **753**, 122-145. [MOST 105-2118-M-035-003-MY2]

2017

32. **Chen***, **C.W.S.** and Lee, S. (8/2017) Bayesian causality test for integer-valued time series models with applications to climate and crime data, *Journal of the Royal Statistical Society Series C – Applied Statistics*, **66**, 797-814. [MOST 105-2118-M-035-003-MY2 and MOST 103-2118-M-035-002-MY2] (2020 SCI Statistics & Probability, IF 1.864)
33. Lee, S., Park, S., and **Chen***, **C.W.S.** (8/2017) On Fisher's dispersion test for integer-valued autoregressive Poisson models with applications, *Communications in Statistics - Theory and Methods*, **46**, 9985-9994. [MOST 103-2118-M-035-002-MY2] (2020 SCI Statistics & Probability, IF 0.893)
34. **Chen***, **C.W.S.**, Hsu, Y.T., and Taniguchi, M. (8/2017) Discriminant analysis by quantile regression with application on the climate change problem, *Journal of Statistical Planning and Inference*, **187**, 17-27. [MOST 103-2118-M-035-002-MY2 and MOST 105-2118-M-035-003-MY2] (2020 SCI Statistics & Probability, IF 1.111)
35. Truong, B.C. (Ph.D. st), **Chen***, **C.W.S.**, and Sriboonchitta, S. (7/2017) Hysteretic Poisson INGARCH model for integer-valued time series, *Statistical Modelling*, **17**, 1-22. [MOST 105-2118-M-035-003-MY2 and MOST 103-2118-M-035-002-MY2] (2020 SCI Statistics & Probability, IF 2.039)
36. **Chen***, **C.W.S.**, Weng, M.M.C., and Watanabe, T. (7/2017) Bayesian forecasting of Value-at-Risk based on variant smooth transition heteroskedastic models, *Statistics and Its Interface*, **10**, 451-470. [MOST 103-2118-M-035-002-MY2 and MOST 104-2410-H-035-004] (2021 SCI Mathematics, Interdisciplinary Applications, IF 0.716)
37. **Chen***, **C.W.S.** and Lin, T.Y. (5/2017) Nonparametric tolerance limits for pair trading, *Finance Research Letters*, **21**, 1-9. [MOST 104-2410-H-035-004 and MOST 103-2118-M-035-002-MY2] (2021 SSCI Business, Finance Rank, 1/111, IF 9.848)
38. Gerlach, R. and **Chen***, **C.W.S.** (2/2017) Semi-parametric expected shortfall forecasting in financial markets, *Journal of Statistical Computation and Simulation*, **87**, 1084-1106. [MOST 105-2118-M-035-003-MY2] (2020 SCI Statistics & Probability, IF 1.424)
39. **Chen***, **C.W.S.**, Khamthong, K. (Ph.D. st), and Lee, S. (2/2017) Structural breaks of CAPM-type market model with heteroskedasticity and quantile regression, in V. Kreinovich, *et al.* (eds.), *Robustness in Econometrics*, Springer International Publishing Switzerland, **692**, 111-134. [MOST 105-2118-M-035-003-MY2 and MOST 103-2118-M-035-002-MY2]
40. **Chen***, **C.W.S.**, Wang, Z., Sriboonchitta, S., and Lee, S. (1/2017) Pair trading based on quantile forecasting of smooth transition GARCH models, *North American Journal of Economics and Finance*, **39**, 38-55. [MOST 104-2410-H-035-004 and MOST 103-2118-M-035-002-MY2] (2021 SSCI Business, Finance, Economics, IF 3.136).
41. **Chen***, **C.W.S.**, Li, M., Nguyen, N.T.H., and Sriboonchitta, S. (1/2017) On asymmetric market model with heteroskedasticity and quantile regression, *Computational Economics*, **49**, 155-174. [MOST 104-2410-H-035-004 and MOST 103-2118-M-035-002-MY2] (2020 SSCI Economics, Management, IF 1.876)

2015-2016

42. [Truong, B.C.](#) (Ph.D. st), **Chen***, **C.W.S.**, and So, M.K.P. (11/2016) Model selection of a switching mechanism for financial time series, *Applied Stochastic Models in Business and Industry*, **32**, 836-851. DOI: 10.1002/asmb.2205. [MOST 103-2118-M-035-002-MY2] (2021 SCI Statistics & Probability, IF 1.497).
43. Gerlach, R., **Chen***, **C.W.S.**, and [Lin, E.M.H.](#) (11/2016) Bayesian assessment of dynamic quantile forecasts, *Journal of Forecasting*, **35**, 751-764. [MOST 103-2118-M-035-002-MY2] (2021 SSCI Management, Economics, IF 2.627)
44. **Chen***, **C.W.S.** and [Truong, B.C.](#) (Ph.D. st) (10/2016) On double hysteretic heteroskedastic model, *Journal of Statistical Computation and Simulation*, **86**, 2684-2705. [MOST 103-2118-M-035-002-MY2 and MOST 104-2410-H-035-004] (2020 SCI Statistics & Probability, IF 1.424)
45. **Chen***, **C.W.S.**, So, M.K.P., [Li, J.](#), and Sriboonchitta, S. (7/2016) Autoregressive conditional negative binomial model applied to over-dispersed time series of counts. *Statistical Methodology*, **31**, 73-90. <http://dx.doi.org/10.1016/j.stamet.2016.02.001>. [MOST 103-2118-M-035-002-MY2] (2016 SCI Statistics & Probability, IF 0.670)
46. **Chen***, **C.W.S.** and Lee, S. (7/2016) Generalized Poisson autoregressive models for time series of counts. *Computational Statistics & Data Analysis*, **99**, 51-67. DOI: 10.1016/j.csda.2016.01.009. [MOST 103-2118-M-035-002-MY2] (2021 SCI Statistics & Probability, IF 2.035)
47. Lee, S., Lee, Y., and **Chen, C.W.S.** (5/2016) Parameter change test for zero-inflated generalized Poisson autoregressive models, *Statistics*, **50**, 540-557. [MOST 103-2118-M-035-002-MY2] (2021 SCI Statistics & Probability, IF 2.346)
48. **Chen***, **C.W.S.**, Lee, S., and [Chen, S.Y.](#) (Ph.D. st) (3/2016) Local non-stationarity test in mean for Markov switching GARCH models: an approximate Bayesian approach, *Computational Statistics*, **31**, 1-24. [MOST 103-2118-M-035-002-MY2] (2021 SCI Statistics & Probability, IF 1.405)
49. **Chen***, **C.W.S.** and Lee, S. (3/2016) A local unit root test in mean for financial time series, *Journal of Statistical Computation and Simulation*, **86**, 788-806. [MOST 103-2118-M-035-002-MY2] (2020 SCI Statistics & Probability, IF 1.424)
50. **Chen***, **C.W.S.**, So, M.K.P., and Chiang, T.C. (3/2016) Evidence of stock returns and abnormal trading volume: a threshold quantile regression approach, *Japanese Economic Review*, **67**, 96-124. (2021 SSCI Economics, IF 0.776)
51. Gerlach, R. and **Chen***, **C.W.S.** (1/2016) Bayesian expected shortfall forecasting incorporating the intraday range, *Journal of Financial Econometrics*, **14**, 128-158. [NSC 101-2118-M-035-006-MY2] (2021 SSCI Business, Finance, Economics, IF 3.976).

2014

52. **Chen***, **C.W.S.**, Gerlach, R., and [Lin, E.M.H.](#) (Postdoc) (8/2014) Bayesian estimation of smoothly mixing time-varying parameter GARCH models, *Computational Statistics & Data Analysis*, **76**, 194-209. [NSC 99-2118-M-035-001-MY2 and NSC 101-2118-M-035-006-MY2] (2021 SCI Statistics & Probability, IF 2.035).

53. Choy, S.T.B., **Chen***, **C.W.S.**, and Lin, E.M.H. (Ph.D. st) (7/2014) Bivariate asymmetric GARCH models with heavy tails and dynamic conditional correlations, *Quantitative Finance*, **14**, 1297 - 1313. [NSC 99-2118-M-035-001-MY2, NSC96-2118-M-035-002-MY3] (2020 SCI Mathematics, interdisciplinary applications, IF 2.222)
54. **Chen***, **C.W.S.**, Chen, M., and Chen, S.Y. (Ph.D. st) (2014) Pairs trading via three-regime threshold autoregressive GARCH models, in *Modeling Dependence in Econometrics*, Advances in Intelligent Systems and Computing, Huynh *et al.* (eds.), Springer International Publishing Switzerland, 127-140. [NSC 101-2118-M-035-006-MY2]

2013

55. **Chen***, **C.W.S.**, Liu, F.C., (Ph.D. st) and So, M.K.P. (12/2013) Threshold variable selection of asymmetric stochastic volatility models, *Computational Statistics*, **28**, 2415-2447. [NSC 99-2118-M-035-001-MY2 and NSC 101-2118-M-035-006-MY2] (2021 SCI Statistics & Probability, IF 1.405)
56. **Chen***, **C.W.S.**, Chen, S.Y., (Ph.D. st) and Lee, S. (11/2013) Bayesian unit root test in double threshold heteroskedastic models, *Computational Economics*, **42**, 471-490. [NSC 101-2118-M-035-006-MY2] (2020 SSCI Economics, Management, IF 1.876)
57. **Chen***, **C.W.S.** and Gerlach, R. (7/2013) Semi-parametric quantile estimation for double threshold autoregressive models with heteroskedasticity, *Computational Statistics*, **28**, 1103-1131. [NSC 99-2118-M-035-001-MY2] (2021 SCI Statistics & Probability, IF 1.405)
58. Yu, K., **Chen***, **C.W.S.**, Reed, C. and Dunson, D.B. (6/2013) Bayesian variable selection in quantile regression, *Statistics and Its Interface*, **6**, 261-274. [NSC 99-2118-M-035-001-MY2 and NSC 101-2118-M-035-006-MY2] (2021 SCI Mathematics, Interdisciplinary Applications, IF 0.716)
59. **Chen***, **C. W. S.**, Lin, E. M. H., (Postdoc) and Lin, Y.R. (2013) A Bayesian perspective on mixed GARCH models with jumps, in *Uncertainty Analysis in Econometrics with Applications*, Huynh *et al.* (eds.), Springer Verlag, 141-154. [NSC101-2118-M-035-006-MY2]

2012

60. **Chen***, **C.W.S.**, Gerlach, R., Lin, E.M.H., (Postdoc) and Lee, W.C.W. (12/2012) Bayesian forecasting for financial risk management, pre and post the global financial crisis, *Journal of Forecasting*, **31**, 661-687. [NSC 96-2118-M-035-002-MY3] (2021 SSCI Management, Economics, IF 2.627)
61. Chan, J.S.K., Lam, C.P.Y., Yu, P.L.H., Choy, S.T.B. and **Chen, C.W.S.** (11/2012) Bayesian conditional autoregressive geometric process model for range data, *Computational Statistics & Data Analysis*, **56**, 3006-3019. [NSC 96-2118-M-035-002-MY3] (2021 SCI Statistics & Probability, IF 2.035)
62. Hsieh, Y.-H., Ruan, Y., **Chen, C.W.S.**, Shi, W., Li, D., Luo, F., and Shao, Y. (8/2012) HIV prevalence and underreporting of men who have sex with men in Beijing, *International Journal of STD & AIDS*, **23**, 606-607. (2021 SCI Infectious Diseases, IF 1.456)
63. **Chen***, **C.W.S.**, Gerlach, R., Hwang, RBK, and McAleer, M. (5/2012) Forecasting Value-at-Risk using nonlinear regression quantiles and the intra-day range, *International Journal of Forecasting*, **28**, 557-574. [NSC 99-2118-M-035-001-MY2, NSC96-2118-M-035-002-MY3] (2021 SSCI Management, Economics, IF 7.022)

64. **Chen***, **C.W.S.**, Lin, S., and Yu, P.L.H. (6/2012) Smooth transition quantile capital asset pricing models with heteroscedasticity, *Computational Economics*, **40**, 19-48. [NSC 99-2118-M-035-001-MY2] (2020 SSCI Economics, Management, IF 1.876)
65. Lin, E.M.H., (Ph.D. st) **Chen***, **C.W.S.**, Gerlach, R. (2/2012) Forecasting volatility with asymmetric smooth transition dynamic range models, *International Journal of Forecasting*, **28**, 384–399. [NSC 99-2118-M-035-001-MY2, NSC96-2118-M-035-002-MY3] (2021 SSCI Management, Economics, IF 7.022)

2011

66. **Chen***, **C.W.S.**, Gerlach, R., and Liu, F.C. (Postdoc) (11/2011) Detection of structural breaks in a time-varying heteroskedastic regression model, *Journal of Statistical Planning and Inference*, **141**, 3367-3381. [NSC 99-2118-M-035-001-MY2] (2020 SCI Statistics & Probability, IF 1.111)
67. Gerlach, R., **Chen***, **C.W.S.**, and Chan, N.C.Y. (10/2011) Bayesian time-varying quantile forecasting for value-at-risk in financial markets, *Journal of Business & Economic Statistics*, **29**, 481-492. [NSC 96-2118-M-035 -002 -MY3] (2020 SCI Statistics & Probability, IF 6.565)
68. **Chen***, **C.W.S.**, Gerlach, R., and Lin, A.M.H. (9/2011) Multi-regime nonlinear capital asset pricing models, *Quantitative Finance*, **11**, 1421-1438. [NSC 96-2118-M-035-002 -MY3] (2020 SCI Mathematics, interdisciplinary applications, IF 2.222).
69. **Chen***, **C.W.S.**, So, M.K.P., and Liu, F.C. (Postdoc) (6/2011) A review of threshold time series models in finance, *Statistics and Its Interface*, **4**, 167-181. [NSC 99-2118-M-035-001-MY2] (2021 SCI Mathematics, Interdisciplinary Applications, IF 0.716)
70. **Chen***, **C.W.S.**, Chan, J.S.K., Gerlach, R., and Hsieh, W. (6/2011) A comparison of estimators for regression models with change points, *Statistics and Computing*, **21**, 395-414. [NSC 96-2118-M-035 -002 -MY3] (2019 SCI Statistics & Probability, Computer Science, Theory & Methods, IF 3.035)
71. **Chen***, **C.W.S.**, Chan, J.S.K., So, M.K.P., and Lee, K. (4/2011) Classification in segmented regression problems, *Computational Statistics & Data Analysis*, **55**, 2276-2287. [NSC 99-2118-M-035-001-MY2; NSC 96-2118-M-035-002-MY3] (2021 SCI Statistics & Probability, IF 2.035)
72. **Chen***, **C.W.S.**, Liu, F.C., (Ph.D. st) and Gerlach, R. (3/2011) Bayesian subset selection for threshold autoregressive moving-average models, *Computational Statistics*, **26**, 1-30. [NSC 96-2118-M-035-002-MY3] and grant 07G27503 (2021 SCI Statistics & Probability, IF 1.405)

2010

73. **Chen*** **C.W.S.**, Gerlach, R., Choy, S.T.B. and Lin, C. (3/2010) Estimation and inference for exponential smooth transition nonlinear volatility models, *Journal of Statistical Planning and Inference*, **140**, 719-733. [NSC 96-2118-M-035-002-MY3] (2020 SCI Statistics & Probability, IF 1.111)
74. Hsieh, Y.-H., **Chen, C.W.S.**, Hsu Schmitz, S.F., King, C.C., Chen, W. J., Wu, Y.C., Ho, M.S. (1/2010) Candidate genes associated with susceptibility for SARS-coronavirus, *Bulletin of Mathematical Biology*, **72**, 122-132. (2021 SCI Mathematical & Computational Biology, IF 3.871)
75. **Chen***, **C.W.S.**, Gerlach, R., and Lin, A.M.H. (1/2010) Falling and explosive, dormant and rising markets via multiple-regime financial time series models, *Applied Stochastic Models in Business and*

Industry, **26**, 28-49. [NSC 96-2118-M-035-002-MY3] (2021 SCI Statistics & Probability, IF 1.497)

2009

76. **Chen***, **C. W. S.**, So, M. K. P., and Lin, E.M.H. (Ph.D. st) (12/2009) Volatility forecasting with double Markov switching GARCH models, *Journal of Forecasting*, **28**, 681-697. [NSC95-2118-M-035-001.] (2021 SSCI Management, Economics, IF 2.627)
77. Hsieh, Y.-H., **Chen, C.W.S.** (6/2009) Turning points, reproduction number, and impact of climatological events for multi-wave Dengue outbreaks, *Tropical Medicine & International Health*, **14**, 628-638. (2021 SCI Public, Tropical Medicine, IF 3.918)
78. Lai, Y., **Chen***, **C.W.S.**, and Gerlach, R.H. (4/2009) Optimal dynamic hedging via copula-threshold-GARCH Models, *Mathematics and Computers in Simulation*, a special issue on Modelling and Managing Financial Risk, **79**, 2609-2624. [NSC95-2118-M-035-001] (2021 SCI Mathematics, Applied, IF 3.601)
79. **Chen***, **C.W.S.**, Gerlach, R. H., Cheng, N.Y.P., and Yang, Y.L. (4/2009) The Impact of Structural Breaks on the Integration of the ASEAN-5 Stock Markets, *Mathematics and Computers in Simulation*, a special issue on Modeling and Managing Financial Risk, **79**, 2654-2664. [NSC95-2118-M-035-001] (2021 SCI Mathematics, Applied, IF 3.601)
80. **Chen***, **C.W.S.**, Gerlach, R., and Wei, D.C.M. (4/2009) Bayesian causal effects in quantiles: accounting for heteroscedasticity, *Computational Statistics & Data Analysis*, a special issue on Computational Econometrics, **53**, 1993-2007. [NSC 96-2118-M-035-002-MY3] (2021 SCI Statistics & Probability, IF 2.035)

2008

81. Gerlach, R. and **Chen***, **C.W.S.** (12/2008) Bayesian inference and model comparison for asymmetric smooth transition heteroskedastic models, *Statistics and Computing*, **18**, 391-408. [NSC95-2118-M-035-001] and grant 06G27022 from FCU. (2019 SCI Statistics & Probability, Computer Science, Theory & Methods, IF 3.035)
82. **Chen***, **C.W.S.**, Gerlach, R., and So, M.K.P. (12/2008) Bayesian model selection for heteroskedastic models, in Siddhartha Chib, William Griffiths, Gary Koop, Dek Terrell (ed.) *Bayesian Econometrics (Advances in Econometrics, Volume 23)*, Emerald Group Publishing Limited, 567-594 (2005 SSCI Economics Rank 168/175). [NSC95-2118-M-035-001] and grant 06G27022 from FCU.
83. **Chen*** **C.W.S.**, Gerlach, R., and Tai, A.P.J. (12/2008) Testing for nonlinearity in mean and volatility for heteroskedastic models, *Mathematics and Computers in Simulation*. **79**, 489-499. [NSC96-2118-M-002-MY3] (2021 SCI Mathematics, Applied, IF 3.601)
84. **Chen***, **C.W.S.**, Lin, E.M.H. (Ph.D. st), Liu, F.C. (Ph.D. st), and Gerlach, R. (5/2008) Bayesian estimation for parsimonious threshold autoregressive models in R, *R Journal*, **8**, 26-33. [NSC96-2118-M-002-MY3] and grant 06G27022 from FCU. (2020 SCI Statistics & Probability, IF 3.984)
85. **Chen***, **C.W.S.**, Liu, F.C. (Ph.D. st), and So, M.K.P. (3/2008) Heavy-tailed distributed threshold stochastic volatility models in financial time series, *Australian & New Zealand Journal of Statistics*, **50**, 29-51. (2021 SCI Statistics & Probability, IF 0.867)

86. **Chen***, **C.W.S.**, Gerlach, R., and Lin, E.M.H. (Ph.D. st) (2/2008) Volatility forecast using threshold heteroskedastic models of the intra-day range, *Computational Statistics & Data Analysis*, on Statistical & Computational Methods in Finance, **52**, 2990-3010. [NSC95-2118-M-035-001] (2021 SCI Statistics & Probability, IF 2.035)
87. So, M.K.P., **Chen***, **C. W. S.**, Lee, J.Y., and Chang, Y.P. (2/2008) An empirical evaluation of fat-tailed distributions in modeling financial time series, *Mathematics and Computers in Simulation*, **77**, 96-108. [NSC94-2118-M-035-001] (2021 SCI Mathematics, Applied, IF 3.601)

2007

88. Chiang, T.C., **Chen, C.W.S.**, and So, M.K.P. (12/2007) Asymmetric return and volatility responses to composite news from stock markets, *Multinational Finance Journal*, **11**, 179-210. (2017 SSCI, IF 1.5)
89. So, M.K.P, **Chen, C.W.S.**, Chiang, T.C. and Lin, D.S.Y. (7/2007) Modelling financial time Series with threshold nonlinearity in returns and trading volume, *Applied Stochastic Models in Business and Industry*, **23**, 319-338. [NSC94-2118-M-035-001] (2021 SCI Statistics & Probability, IF 1.497)
90. Hsieh, Y.-H., King, C.C., **Chen, C.W.S.**, Ho, M.S., Hsu, S.B. and Wu, YC (1/2007) Impact of quarantine on the 2003 SARS outbreak: a retrospective modeling study, *Journal of Theoretical Biology*, **244**, 729-736. (2020 SCI Biology, IF 2.691)

2006

91. **Chen***, **C.W.S.**, Gerlach, R.H., and So, M.K.P. (12/2006) Comparison of nonnested asymmetric heteroscedastic models, *Computational Statistics & Data Analysis*, a special issue on Nonlinear Modelling and Financial Econometrics, **51**, 2164-2178. [NSC94-2118-M-035-001] (2021 SCI Statistics & Probability, IF 2.035)
92. **Chen, C.W.S.**, Yang, M.J., Gerlach, R.H., and Lo, H.J. (7/2006) The asymmetric reactions of mean and volatility of stock returns to domestic and international information based on a four-regime double-threshold GARCH Model, *Physica A - Statistical Mechanics And Its Applications*, **366**, 401-418. [NSC93-2118-M-035-003] (2021 SCI Physics, Multidisciplinary, IF 3.778)
93. Lee, S.-M., **Chen***, **C.W.S.**, Gerlach, R.H., and Hwang, L.-H. (6/2006) Estimation in Ricker's two-release method: a Bayesian approach, *Australian & New Zealand Journal of Statistics*, **48**, 157-169. [NSC92-2118-M-035-006] (2021 SCI Statistics & Probability, IF 0.867)
94. So, M.K.P., **Chen***, **C.W.S.** and Liu, F.C. (4/2006) Best subset selection of autoregressive models with exogenous variables and generalized autoregressive conditional heteroscedasticity errors, *Journal of the Royal Statistical Society Series C-Applied Statistics*, **55**, 201-224. [NSC93-2118-M-035-003] (2020 SCI Statistics & Probability, IF 1.864)
95. Hsieh, Y.H., **Chen, C.W.S.**, Lee, S.M., Chen, Y.M.A., Wu, S.I., Lai, S.F., and Chang, A.L. (4/2006) Estimating the number of HIV-infected gay sauna patrons in Taipei area, *Physica A - Statistical Mechanics And Its Applications*, **362**, 495-503. [DOH92-DC-1026] (2021 SCI Physics, Multidisciplinary, IF 3.778)
96. **Chen***, **C.W.S.** and Hsieh, Y.H. (1/2006) Bias may be unintentional but it's still there, *Nature*, **439**, 18. (2021 SCI Multidisciplinary Science, IF 69.504)

97. Gerlach, R., **Chen***, **C.W.S.**, Lin, D.S.Y., and Huang, M.H. (2/2006) Asymmetric responses of international stock markets to trading volume, *Physica A - Statistical Mechanics And Its Applications*, **360**, 422-444. [NSC93-2118-M-035-003] (2021 SCI Physics, Multidisciplinary, IF 3.778)
98. **Chen, C.W.S.** and So, M.K.P. (1/2006) On a threshold heteroscedastic model. *International Journal of Forecasting*, **22**, 73-89. [NSC93-2118-M-035-003] (2021 SSCI Management, Economics, IF 7.022)

2005

99. **Chen***, **C.W.S.**, So, M.K.P., and, Gerlach, R.H. (12/2005) Assessing and testing for threshold nonlinearity in stock returns, *Australian & New Zealand Journal of Statistics*, **47**, 473-488. [NSC92-2118-M-035-006] (2021 SCI Statistics & Probability, IF 0.867)
100. **Chen***, **C.W.S.** and Yu, T.H.K. (8/2005) Long-term dependence with asymmetric conditional heteroscedasticity in stock returns, *Physica A - Statistical Mechanics And Its Applications*, **353**, 413-424. [FCU-RD-89-052, FCU-RD-90-051] (2021 SCI Physics, Multidisciplinary, IF 3.778)
101. **Chen, C.W.S.**, So, M.K.P., and, Gerlach, R.H. (6/2005) Asymmetric response and interaction of US and local markets news in financial markets, *Applied Stochastic Models in Business and Industry*, **21**, 273-288. [NSC92-2118-M-035-006] (2021 SCI Statistics & Probability, IF 1.497)
102. Hsieh, Y.H., King, C.C., **Chen, C.W.S.**, Ho, M.S., Lee, J.Y., Liu, F.C., Wu, Y.C., and Wu, J. S. (2/2005) Quarantine for SARS, Taiwan, *Emerging Infectious Diseases*, **11**, 278 - 282. (2021 SCI Immunology, Infectious Disease, IF 16.126)
103. So, M.K.P., **Chen, C.W.S.**, Chen, M.T. (1/2005) A Bayesian threshold nonlinearity test in financial time series, *Journal of Forecasting*, **24**, 61-75. [NSC91-2118-M-035-002] (2021 SSCI Management, Economics, IF 2.627)

2004

104. **Chen***, **C.W.S.**, Lee, J.C., Lee, S.Y., and Niu, W.F. (10/2004) Bayesian estimation for time series regressions improved with exact likelihoods, *Journal of Statistical Computation and Simulation*. **74**, 727 - 740. [NSC91-2118-M-035-002] (2020 SCI Statistics & Probability, IF 1.424)
105. Hsieh, Y.H., **Chen, C.W.S.**, and Hsu, S.B. (8/2004) SARS outbreak in Taiwan: what we can learn from modeling, *Emerging Infectious Diseases*, **10**, 1515-16. (2021 SCI Immunology, Infectious Disease, IF 16.126)
106. Hsieh, Y.H. and **Chen, C.W.S.** (5/2004) Mathematical modeling of SARS: errata and updates, Online, *Journal of Epidemiology and Community Health* (2021 SCI Public, Environmental & Occupational Health, IF 6.286)
107. Hsieh, Y.H., **Chen, C.W.S.**, and Hsu, S.B. (2/2004) SARS outbreak, Taiwan, 2003, *Emerging Infectious Diseases*, **10**, 201-206. (2021 SCI Immunology, Infectious Disease, IF 16.126)

2003

108. So, M.K.P. and **Chen, C.W.S.** (1/2003) Subset threshold autoregression. *Journal of Forecasting*, **22**, 49-66. (2021 SSCI Management, Economics, IF 2.627) [NSC90-2118-M-035-008]

109. Hsieh, Y.H. and **Chen, C.W.S.** (6/2003) Severe Acute Respiratory Syndrome: numbers do not tell whole story, *BMJ-British Medical Journal*, **326**, 1395-1396. (2021 SCI Medicine, General & Internal, IF 96.216)
110. **Chen, C.W.S.**, Chiang, T.C. and So, M.K.P. (9/2003) Asymmetrical reaction to US stock-return news: evidence from major stock markets based on a double-threshold model. *Journal of Economics and Business*. Special issue on Globalization in the New Millennium: Evidence on Financial and Economic Integration. **55**, 487-502. [NSC90-2118-M-035-008] (2021 SSCI Economics, IF 1.06)
111. Hsieh, Y.H. and **Chen, C.W.S.** (11/2003) Re: Mathematical modeling of SARS: cautious in all our movements, *Journal of Epidemiology and Community Health*. Online (2021 SCI Public, Environmental & Occupational Health, IF 6.286)

2002

112. Hsieh, Y.H., de Arazoza, H., Lee, S.-M., and **Chen, C.W.S.** (6/2002) Estimating the number of Cubans infected sexually by human immunodeficiency virus using contact tracing data, *International Journal of Epidemiology*, **31**, 679-683. [NSC88-2118-M-035-001] (2021 SCI Public, Environmental & Occupational Health, IF 9.685)

2001

113. **Chen***, **C.W.S.**, Cherng, T.-H., and Wu, B. (12/2001) On the selection of subset bilinear time series models: a genetic algorithm approach. *Computational Statistics*, **16**, 505-517. [NSC87-2118-M-035-004], [NSC88-2118-M-035-001] (2021 SCI Statistics & Probability, IF 1.405)
114. **Chen***, **C.W.S.** and Wen, Y.W. (6/2001) On goodness of fit for time series regression models. *Journal of Statistical Computation and Simulation*, **69**, 239-256. [NSC89-2118-M-035-003] (2020 SCI Statistics & Probability, IF 1.424)
115. Hsieh, Y. H., **Chen, C.W.S.**, Lee, S.-M., and de Arazoza, H. (2/2001) On the Recent Sharp Increase of HIV Detections in Cuba. *Aids*, 426-428. [NSC88-2118-M-035-001] (2021 SCI Infectious diseases, IF 4.632)

2000

116. Hsieh, Y.-H., **Chen, C.W.S.**, and Lee, S.-M. (11/2000) Empirical Bayes approach to estimating the number of HIV-infected individuals in hidden and elusive populations. *Statistics in Medicine*, **19**, 3095-3108. [NSC87-2118-M-035-004] (2021 SCI Statistics & Probability, IF 2.497)

1999

117. **Chen***, **C.W.S.** (12/1999) Subset selection of autoregressive time series models. *Journal of Forecasting*, **18**, 505-516. [NSC86-2115-M-035-017] (2021 SSCI Management, Economics, IF 2.627)
118. **Chen***, **C.W.S.**, Lee, S.-M., Hsieh, Y.-H., and Ungchusak, K. (11/1999) A unified approach to estimating population size for a births only model. *Computational Statistics & Data Analysis*, **32**, 29-46. [NSC86-2115-M-035-017] (2021 SCI Statistics & Probability, IF 2.035)

1998

119. **Chen***, **C.W.S.** (9/1998) A Bayesian analysis of generalized threshold autoregressive models. *Statistics & Probability Letters*, **40**, 15-22. [NSC85-2115-M-035-007] (2020 SCI Statistics & Probability, IF 0.870)
120. Lee, S.-M. and **Chen***, **C.W.S.** (10/1998) Bayesian inference of population size for Behavioral response models. *Statistica Sinica*, **8**, 1233-1247. [NSC86-2115-M-035-017] (2021 SCI Statistics & Probability, IF 1.330)

1997

121. **Chen**, **C.W.S.**, McCulloch, R.E., and Tsay, R.S. (4/1997) A unified approach to estimating and modeling linear and nonlinear time series. *Statistica Sinica*, **7**, 451-472. (2021 SCI Statistics & Probability, IF 1.330)
122. **Chen***, **C.W.S.** (5/1997) Detection of additive outliers in bilinear time series. *Computational Statistics & Data Analysis*, **24**, 283-294. [NSC83-0208-M-035-011] (2021 SCI Statistics & Probability, IF 2.035)
123. **Chen***, **C.W.S.** and Lee, J.C. (9/1997) On selecting a power transformation in time-series analysis. *Journal of Forecasting*, **16**, 343-354. [NSC84-2121-M-035-007] (2021 SSCI Management, Economics, IF 2.627)

1995-1992

124. **Chen***, **C.W.S.** and Lee, J.C. (9/1995) Bayesian inference of threshold autoregressive models. *Journal of Time Series Analysis*, **16**, 483-492. [NSC82-0115-M-035-012-T] (2020 SCI Statistics & Probability, IF 1.366)
125. **Chen***, **C.W.S.** (6/1992a) Bayesian inferences and forecasting in bilinear time series models. *Communications in Statistics - Theory and Methods*, **21**, 1725-1743. (2020 SCI Statistics & Probability, IF 0.893)
126. **Chen***, **C.W.S.** (12/1992b) Bayesian analysis of bilinear time series models: a Gibbs sampling approach. *Communications in Statistics - Theory and Methods*, **21**, 3407-3425. (2020 SCI Statistics & Probability, IF 0.893)

Software (R package)

Chen* **C.W.S.**, Lin, E.M.H. (Ph.D. st), Liu, F.C. (Ph.D. st), and Gerlach, R. (2008) BAYSTAR: On Bayesian analysis of Threshold autoregressive model

<http://cran.r-project.org/web/packages/BAYSTAR/index.html>

Professional Membership

- American Statistical Association, USA
- Institute of Mathematical Statistics
- Fellow, the Royal Statistical Society, UK

- Chartered Statistician, the Royal Statistical Society, UK, (Designation: CStat.)
- Elected member, International Statistical Institute (ISI)
- International Society for Bayesian Analysis (ISBA).
- International Chinese Statistical Association.

Talks Given at Conferences, Seminar, and Workshops

- [The 3rd Yushan Conference](#), December 8, 2023, Keynote speaker, National Yang-Ming Chiao Tung University, Taiwan.
- 112 Statistics Academic Symposium, December 1, 2023, National Tsing Hua University, Taiwan.
- The 6th International Conference on Econometrics and Statistics (EcoSta 2023), August 1-3, 2023, invited speaker, Waseda University, Japan.
- NUS Waseda Workshop 2023, March 14-17, 2023, invited speaker, National University of Singapore, Singapore.
- The International Conference on Applied Statistics 2022 (ICAS 2022), held hybrid Conference with Zoom on November 3-4, 2022, Invited speaker, <http://icas2022.stat.kmutnb.ac.th/program.php>
- EcoSta 2022, Ryukoku University, Japan, held a hybrid Conference with Zoom on June 4-6, 2022, Invited speaker.
- 16th Brazilian Meeting of Bayesian Statistics and VI Latin American Conference on Statistical Computing, held online on March 16-18, 2022, Keynote speaker.
- Waseda Symposiums, Waseda University, Japan, held a hybrid Conference with Zoom on March 7-9, 2022, Invited speaker.
- IASC-ARS 2022, the 11th Conference of the IASCARS.
- The Asian Regional Section of the International Association for Statistical Computing, Doshisha University, Kyoto, Japan, held a hybrid Conference with Zoom on February 21-24, 2022, Invited speaker.
- EAC-ISBA 2021, The 5th EAC-ISBA Conference: Nov 14 -16, 2021, Online and in-person, Invited speaker.
- Workshop: Asset Pricing and Risk Management, invited speaker, August 26-30, 2019, National University of Singapore, Singapore.
- Data Science, Statistics & Visualisation, DSSV 2019, invited speaker, August 13-15, 2019, Kyoto, Japan.
- EAC ISBA 2019 Conference, invited speaker, July 13-14, 2019, Kobe, Japan.
- The 12th International Conference of The Thailand Econometric Society 2018, invited speaker and session chair, January 9-11, 2019, Chiang Mai, Thailand.
- Workshops on Financial/Economic Analytics, invited speaker, March 8-9, 2018, Hang Seng University of Hong Kong/The Hong Kong Polytechnic University, Hong Kong.
- Kouchi International Symposium: Recent Developments of Quantile Methods, Causality and High Dim Statistics, invited speaker, March 3-5, 2018, Kouchi, Japan.
- Kagawa International Symposium: Theme: Recent Developments in Statistics and Econometrics, invited speaker and session chair, March 1-3, 2018, Kagawa, Japan.
- Waseda International Symposium 2018: Recent developments in Time Series Analysis: Quantile Regression, High Dimensional Data & Causality, invited speaker and session chair, February 26-28, 2018, Tokyo, Japan.

- The 11th International Conference of The Thailand Econometric Society 2018, invited speaker and session chair, January 10-12, 2018, Chiang Mai, Thailand.
- 2017 International Workshop on “New Developments in Business Analytics or Big Data”, August 3-4, 2017, organizer, Feng Chia University, Taiwan.
- The 1st International Conference on Econometrics and Statistics (EcoSta 2017), June 15-17, 2017, invited speaker, UHUST, Hong Kong, China.
- Waseda International Symposium, invited speaker and chair, February 27 - March 1, 2017, Waseda University, Tokyo, Japan
- Keio International Symposium, invited speakers and chair, March 2 - 4, 2017, Keio University, Tokyo, Japan.
- Macroeconometric Modelling Workshop, MMW 2016, December 1-2, 2016, invited speaker, Institute of Economics, Academia Sinica, Taiwan.
- The Asian Regional Section of the IASC (IASC-ARS) Interim Conference and 2016 KSS Fall Conference, invited speaker, November 4-5, 2016, Daejeon, South Korea.
- International Conference on Applied Statistics 2016 (ICAS 2016), July 13-15, 2016, invited speaker, Phuket, Thailand.
- The 4th IMS Asia Pacific Rim Meeting (IMS-APRM), invited speaker, June 27-30, 2016, Hong Kong.
- International Society of Bayesian Analysis (ISBA) World Meeting 2016, invited speaker, June 13-17, 2016, Sardinia, Italy.
- The 9th International Conference of the Thailand Econometrics Society (TES2016), invited speaker, January 6-8, 2016, Chiang Mai, Thailand.
- The 9th Conference of the Asian Regional Section of the IASC (IASC-ARS 2015), invited speaker, December 17-19, 2015, Singapore.
- ASA Joint Statistical Meeting 2015, speaker, August 8-13, 2015, Seattle, US.
- International Conference on Applied Statistics 2015 (ICAS 2015), invited speaker, July 15-17, 2015, Pattaya, Thailand.
- “Selected Topics in advanced Time Series Econometrics”, School of Economics, Chiang Mai University, lecturer, 12.4.2014-12.16.2014, Chiang Mai, Thailand.
- Niigata symposium, New Developments of theory and application of statistical science in various fields, invited speaker, topic on Bayesian Inference for Time Series of Counts Models, October 24-26, 2014, Niigata University, Japan.
- Project Research Seminar on Financial and Pension Mathematics, invited speaker, topic on Evidence of Stock Returns and Abnormal Trading Volume: A Quantile Regression Approach, October 22, 2014, Waseda University, Japan.
- The 21st International Conference on Computational Statistics (COMPSTAT 2014), invited speaker, topic on Bayesian assessment of dynamic quantile forecasts, August 19-22, Geneva, Switzerland.
- The third IMS-APRM (Institute of Mathematical Statistics, Asia Pacific Rim Meeting), invited speaker, topic on Bayesian Inference for Time Series of Counts Based on Generalized Autoregressive Conditional Poisson Models, June 29-July 3, 2014, Taipei, Taiwan.

- International Conference on Applied Statistics 2014 (ICAS 2014), invited speaker for Special Topic (CRN): “*Direction of Statistics in Asia: Bayesian Time Series*”, May 21-24, 2014, Khon Kaen, Thailand.
- Seminar, topic on Time Series Analysis in Epidemiology, May 31 2014, Institute of Biostatistics, China Medical University, Taichung, Taiwan.
- Nishi-Izu Seminar, invited speaker, topic on Bayesian Unit Root Test in Double Markov Switching Heteroskedastic Models, March 6-8, 2014, Toi, Nishi Izu, Japan.
- Waseda International Symposium on “Stable Process, Semimartingale, Finance & Pension Mathematics”, invited speaker, topic on Bayesian estimation of smoothly mixing time-varying parameter GARCH models, March 3-5, 2014, Waseda University, Japan.
- Seminar at WISE Xiamen University, invited speaker/visitor, topic on Bayesian Forecasting time-varying parameter GARCH models, February 23-28, 2014, WISE, Xiamen University, China.
- Seminar at Hitotsubashi University, invited speaker/visitor, topic on Bayesian Forecasting time-varying parameter GARCH models, January 21-25, 2014, Hitotsubashi University, Japan.
- The 7th International Conference of the Thailand Econometric Society, invited speaker, topic on Pairs Trading via a Three-Regime Threshold Autoregressive GARCH Model, January 8-9, 2014, Chiang Mai, Thailand.
- The 9th ICSA International Conference, session chair & speaker, topic on Pairs Trading via Multiple-regime Financial Time Series Models, December 20-23, 2013, Hong Kong.
- The 59th ISI World Statistics Congress (WSC), invited speaker, topic on Testing Local Non-stationarity for Double Smooth Transition Heteroskedastic Models, August 25-30, 2013, Hong Kong.
- Joint Meeting of the IASC Satellite Conference for the 59th ISI WSC and the 8th Conference of the Asian Regional Section of the IASC, invited speaker, topic on Testing Local Non-stationarity for Double Smooth Transition Heteroskedastic Models, August 21-23, 2013, Seoul, Korea.
- Frontiers of Time Series Analysis and Related Fields: An International Conference in Honour of Professor W.K. Li, invited speaker, topic on Bayesian Forecasting time-varying parameter GARCH models, July 26-27, 2013, Hong Kong.
- International Conference on Applied Statistics 2013 (ICAS 2013), keynote speaker, topic on A comparison of estimators for regression models with change points, May 14-19, 2013, Maha Sarakham, Thailand.
- Time Series Forum in Lake Kawaguchi, Special Invited Talk (90 minutes), topic on A review of threshold time series models in finance, March 24-27, 2013, Lake Kawaguchi, Japan.
- The Sixth International Conference of the Thailand Econometric Society, invited speaker, January 10-11, 2013, Chiang Mai, Thailand.
- The 20th International Conference on Computational Statistics (COMPSTAT 2012), invited speaker and tutorial speaker, Tutorial by ARS OF IASC: “Bayesian Computing and Applications” (100 minutes), topic on Bayesian evaluation of quantile forecasts, August 27-31, 2012, Limassol, Cyprus.
- IMS-APRM (Institute of Mathematical Statistics, Asia Pacific Rim Meeting), invited speaker, July 2-4, 2012, Tsukuba, Japan.

- Waseda Statistical Symposium on Time Series and Related Topics -A Satellite Meeting of IMS-APRM 2012, invited speaker, topic on Semi-parametric quantile estimation for double threshold autoregressive models with exogenous variables and Heteroskedasticity, July 5-7, 2012, Tokyo, Japan.
- ISBA (International Society for Bayesian Analysis) 2012 World Meeting, invited speaker, topic on A Bayesian perspective on backtesting value-at-risk models, June 25-29, 2012, Kyoto, Japan.
- Waseda University Symposium - Statistics for Biomedical & Social Mathematical Sciences, invited speaker, topic on Bayesian unit root test in double threshold heteroskedastic models, March 1-3, 2012, Tokyo, Japan.
- The Fifth International Conference of the Thailand Econometric Society, invited speaker, Chiang Mai, January 12-13, 2012
- Kyoto Symposium on Recent Development in Statistics, Empirical Finance and Econometrics, invited speaker, November 29 - December 1, 2011, Kyoto University, Kyoto, Japan
- Wakayama Symposium on Empirical Likelihood Method and Its Application to Theory of Classification, December 2 -5, 2011, invited speaker, Wakayama University, Wakayama Japan.
- Waseda University Symposium - Theory and Applications for Time Series Analysis & Atami Seminar, invited speaker, topic on Smooth Transition Quantile Capital Asset Pricing Models with Heteroscedasticity, March 1-4, 2011, Tokyo, Japan.
- Workshop on Recent Advances in Nonlinear Time Series Analysis, invited speaker, February 7-18, 2011, NUS, Singapore.
- The 4th Conference of Thailand Econometric Society, invited speaker, January 13 - 14, 2011, Chiang Mai, Thailand.
- The 4th International Conference on Computational and Financial Econometrics (CFE'10), invited speaker, Scientific Program Committee, and two-session organizer, December 10-12, 2010, London, UK.
- The 2010 Fall Conference of the Korean Statistical Society, special invited lecturer, November 5-6, 2010, Kyonggi University, Korea.
- The 19th International Conference on Computational Statistics, invited speaker, August 22-27, 2010, Paris, France.
- The 2010 Spring Conference of the Korean Statistical Society held jointly with the Asia Regional Section of the International Association for Statistical Computing, invited speaker, May 21-22, 2010, Daejeon, Korea.
- International Workshop on Bayesian Econometrics and Statistics, invited speaker, February 4-5, 2010, University of Tokyo, Japan.
- The 3rd Conference of Thailand Econometric Society, invited speaker, January 7 - 8, 2010, Chiang Mai University, Chiang Mai, Thailand.
- Nonlinear Time Series: Threshold Modelling and Beyond An International Conference in Honour of Professor Howell Tong, invited speaker, December 17 - 19, 2009 the University of Hong Kong, Hong Kong.
- 3rd International Conference on Computational and Financial Econometrics (CFE'09), invited speaker, Scientific Program Committee, and two-session organizer, October 29-31, 2009, Limassol, Cyprus.

- COMISEF (Computational Optimization Methods in Statistics, Econometrics and Finance) Tutorial on Statistical Model Selection, invited speaker, October 27-28, 2009, University of Cyprus, Nicosia (Oct. 27) and Limassol, Cyprus. (Oct. 28).
- University of Sydney, Discipline of Operations Management and Econometrics, seminar speaker, Sydney, Australia, August 14, 2009.
- The 29th Annual International Symposium on Forecasting (ISF) 2009, invited speaker and two-session organizer, June 21-24, 2009, Hong Kong.
- Department of Information Systems, Business Statistics and Operations Management, the Hong Kong University of Science and Technology, Hong Kong 6.19.2009, invited speaker.
- Conference on Statistical Models and Methods in Quantitative Finance and Related Topics 2009, invited speaker, 1.4.2009 – 1.6.2009, Taipei, Taiwan.
- The Joint Meeting of 4th World Conference of the IASC and 6th Conference of the Asian Regional Section of the IASC on Computational Statistics & Data Analysis, invited speaker, Scientific Program Committee, and two-session organizer, 12.5.2008-12.8.2008, Yokohama, Japan.
- The Fourth National Conference of Economists in the topic of "ASEAN Economic Development", keynote speaker, 10.24.2008, Chiang Mai, Thailand.
- "Time Series Analysis and Bayesian Approach", School of Economics, Chiang Mai University, Plenary lecture, 8.11.2008-8.15.2008, Chiang Mai, Thailand.
- The 9th International Society for Bayesian Analysis (ISBA) World Meeting, invited speaker and Program Committee, July 21-25, 2008, Hamilton Island, Australia.
- 2nd International Conference on Computational and Financial Econometrics (CFE08), invited speaker, Scientific Program Committee, and two-session organizer, June 19-21, 2008, Neuchâtel, Switzerland.
- Spring Bayes 2007, (annual meeting of the Australasian Society for Bayesian Analysis), keynote speaker and plenary lecture, topic on Inference and Model Comparison for Asymmetric Smooth Transition Heteroskedastic Models: A Bayesian Perspective, September 26-28, 2007, Gold Coast, Australia.
- The International Workshop on Quantitative Finance and Risk, invited speaker, topic on Testing for nonlinearity in mean and volatility for heteroskedastic models, July 15, 2007, National Chung Hsing University, Taiwan.
- The 2007 International Association for Statistical Computing (IASC) – Asian Regional Section Special Conference, topic on Evaluating Three-regime Threshold Generalized Autoregressive Conditionally Heteroskedastic Models, June 7-8 2007, Seoul, South Korea.
- The third Symposium on Econometric Theory and Applications (SETA2007), invited speaker, April 12-15, 2007, Hong Kong University of Science and Technology (HKUST), Hong Kong.
- The International Workshop on Scientific Computing: Models, Algorithms and Applications, Plenary lecture, December 7-9 2006, UHK, Hong Kong.
- University of Sydney, Discipline of Econometrics and Business Statistics, seminar speaker, Sydney, Australia, September 22, 2006.
- Seminar, Monash University, Department of Econometrics and Business Statistics, Melbourne, Australia, September 8, 2006.

- The Australian Statistical Conference/ New Zealand Statistical Association (ASC/NZSA) Joint Conference 2006, invited speaker, 7.3.2006 – 7.6.2006, Auckland, New Zealand.
- International Conference on Time Series Econometrics, Finance and Risk, topic on Optimal dynamic hedging via asymmetric copula-GARCH Models, June 29 - July 1 2006, Perth, Australia.
- International Conference on Time Series Econometrics, Finance and Risk, topic on The Impact of Structural Breaks on the Integration of the ASEAN-5 Stock Markets, June 29 - July 1 2006, Perth, Australia.
- Academia Sinica, Department of Economics, seminar speaker, Taipei, Taiwan, May 9, 2006.
- The 5th IASC Asian Conference on Statistical Computing, topic on Estimation and model comparison for asymmetric smooth transition heteroscedastic models, 12.15.2005 -12.17.2005, Hong Kong.
- The 5th IASC Asian Conference on Statistical Computing, topic on Forecast volatility from threshold heteroscedastic range models, 12.15.2005 -12.17.2005, Hong Kong.
- The 25th International Symposium on Forecasting 2005, topic on Comparison of Non-nested Asymmetric Heteroscedastic Models, 6.12.2005 - 6.15.2005, San Antonio, Texas, USA.
- WEAI Pacific Rim Conference, topic on Asymmetric reaction to trading volume: Evidence from major stock markets based on a double-threshold model, 1.14.2005 - 1.16.2005, Hong Kong.
- Workshop on Sequential Analysis, Time Series and Related Topics, invited talk, talk on Assessing and testing for threshold nonlinearity in stock returns, 12.27.2004 - 12.28.2004, Academia Sinica, Taiwan.
- Symposium in Financial Econometrics 2004, invited talk, topic on On a threshold heteroscedastic model and its applications to financial market, 10.15.2004, Ling Tung College, Taichung.
- Threshold Models and New Developments in Time Series, invited talk, topic on On a threshold heteroscedastic model, 7.12.2004 - 7.14.2004, University of Hong Kong, Hong Kong.
- Seminar, talk on Best Subset Selection of ARX Models with Conditional Heteroscedasticity, 7.9.2004, University of Newcastle, Australia.
- The 24th International Symposium on Forecasting 2004, invited talk, topic on An assessment of asymmetry in financial markets: evidence of asymmetric response to both the US and local market news, 7.4.2004-7.7.2004, Sydney, Australia.
- The Bernoulli Society EAPR Conference, invited talk, topic on Applications of fat-tailed distributions in financial time series, 12.18.2003 - 12.20.2003, Hong Kong University of Science and Technology (HKUST).
- 2003 NBER/NSF Time Series Conference In Honor of George Tiao's Retirement, Discussant, Space-Time Models for Count Processes with Application to Hurricane Activity Analysis (Xu-Feng Niu), 9.19.2003 - 9.20.2003, Chicago, USA.
- The 22nd, International Symposium on Forecasting 2002, topic on Best subset selection of ARX-GARCH models, 6.23.2002-6.26.2002, Dublin, Ireland.
- The 2nd International Symposium on Business and Industrial Statistics, topic on Double TAR-GARCH Models for Financial Time Series, 8.20.2001 –8.21.2001, Yokohama, Japan.
- The Fifth ICSA International Conference, topic on On Estimation of Fractionally Integrated ARMA Models with Asymmetric Conditional Heteroscedasticity, 8.17.2001- 8.19.2001, Hong Kong.

- Fourth International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing. 11.27.2000-1-12.1.2000, Hong Kong Baptist University.
- International Society for Bayesian Analysis Sixth World Meeting: ISBA2000. 5.28.2000 - 6.1.2000. Heraklion, Crete Greece.
- International Workshop on Statistics in Finance, 7.5.1999 –7.8.1999, Hong Kong.
- 13th International Workshop on Statistical Modeling, 7.27.1998 –7.31. 1998, New Orleans, USA.
- 1996 ASA Joint Statistical Meetings, invited talk, 8.4.1996 - 8.8.1996, Chicago, USA.
- ASA Joint Statistical Meeting, 8.13.1995 - 8.17.1995, Orlando, USA.
- ASA Joint Statistical Meeting, 8.14.1994 - 8.18.1994, Toronto, Canada.
- Second North American Regional of the International Society for Bayesian Analysis (ISBA), 8.12.1994 - 8.13.1994, Toronto, Ontario, Canada.
- 1993 ASA Winter Conference, 1.3.1993 - 1.5.1993, Fort Lauderdale, USA.

Research Grants

Grants awarded 1993-2026

<p>Bayesian Modeling And Forecasting Multiple Time Series Data NSTC 112-2118-M-035 -001 -MY3 NSTC: National Science and Technology Council, Taiwan 2023/8-2026/7 Chief Investigator</p>
<p>International Academic Services as Chair of EAC-ISBA, and AE for International Journals NSTC111-2926-I-035-501 NSTC: National Science and Technology Council, Taiwan 2022/1-2023/3 Chief Investigator</p>
<p>Bayesian Modelling Non-negative Time Series MOST 109-2118-M-035 -005 -MY3 MOST: Ministry of Science and Technology, Taiwan 2020/8-2023/8 Chief Investigator</p>
<p>International Academic Services as Chair of EAC-ISBA, and AE for International Journals MOST 109-2926-I-035-501 MOST: Ministry of Science and Technology, Taiwan 2020/11-2021/12 Chief Investigator</p>
<p>Bayesian Nowcasting And Forecasting for Time Series MOST 107-2118-M-035 -005 -MY2 MOST: Ministry of Science and Technology, Taiwan 2018/8-2021/7 Chief Investigator</p>
<p>Multivariate Hysteretic Autoregressive Model: a Bayesian Approach MOST 105-2118-M-035 -003 -MY2 MOST: Ministry of Science and Technology, Taiwan 2016/8-2018/7 Chief Investigator</p>
<p>Modelling and Forecasting Smooth Transition Realized Volatility MOST 104-2410-H-035-004 MOST: Ministry of Science and Technology, Taiwan 2015/8-2016/7 Chief Investigator</p>
<p>Bayesian Inference of Time Series of Counts And Related Nonlinear Models MOST 103-2118-M-035 -002 -MY2 MOST: Ministry of Science and Technology, Taiwan 2014/8-2016/7 Chief Investigator</p>
<p>Bayesian Estimation, Forecasting, and Testing for Financial Time Series NSC 101-2118-M-035 -006 -MY2 NSC: National Science Council, Taiwan 2012/8 -2014/7 Chief Investigator</p>
<p>Modelling Structure Changes in Financial Time Series: A Bayesian Approach NSC 99-2118-M-035 -001 -MY2 2010/8 -2012/7 Chief Investigator</p>
<p>Promoting Taiwan's International Visibility in Statistical Computing Research NSC 98-2911-I-035 -003</p>

2009/8 -2012/7 Chief Investigator
Quantile Inference to Dynamic Value at Risk NSC 96-2118-M-035 -002 -MY3 2007/8 -2010/7 Chief Investigator
New Developments in Financial Econometrics III 1.1.2008 – 12.31.2008 07G27503 Chief Investigator
New Developments in Financial Econometrics II 3.1.2007 – 12.31.2007 06G27022 Chief Investigator
Testing for Nonlinearity And Asymmetry in Financial Time Series (1/2) (2/2) NSC94-2118-M-035-001, NSC95-2118-M-035-001 2005/8 -2006/7, 2006/8 -2007/7 Chief Investigator
New Developments in Financial Econometrics I 94GB67, FCU 1.1.2006 – 12.31.2006 Chief Investigator
Study of asymmetric volatility and forecasting volatility NSC93-2118-M-035-003 2004/8 -2005/7 Chief Investigator
Modeling of Financial Time Series Data NSC90-2118-M-035-008, NSC91-2118-M-035-002, NSC92-2118-M-035-001, 2001/8 – 2004/7 Chief Investigator
Mathematical and Statistical modeling of HIV Epidemiology in Taiwan DOH91-DC-1059, DOH92-DC-1026 2002/1 – 2002/12, 2003/1 – 2003/12 Co-Investigator
The Investigation of the Social Science Research Methods FCU-RD-89-05, FCU-RD-90-05 2000/8 – 2002/7 Chief Investigator
On the Study of fractional cointegrated economic variables FCU-RD-90-051, FCU-RD-89-052 2000/ 8 – 2002/7 Chief Investigator
Bayesian Analysis of HIV Epidemic Model NSC90-2118-M-005-001 2001/8 – 2002/7

Co-Investigator
The Study of Goodness of Fit for Time Series Models: a Bayesian Approach NSC89-2118-M-035-003, NSC90-2118-M-035-001 1999/8 - 2001/7 Chief Investigator
Robust Bayesian Estimation and Model Selection in Nonlinear Time Series NSC87-2118-M-035-004, NSC88-2118-M-035-001 1997/8 -1999/7 Chief Investigator
Estimation and Prediction of Growth curve models NSC86-2115-M-009-027 1996/8 - 1997/7 Co-Investigator
On the Selection of Best Subset Threshold Autoregressive Time Series Models NSC86-2115-M-035-017 1996/8 - 1997/7 Chief Investigator
Application of Power Transformation in Nonlinear Time Series Models NSC 84-2121-M-035-007 1994/8 - 1995/7 Chief Investigator
Outliers Detection in Nonlinear Time Series NSC83-0208-M-035-011 1994/2 - 1994/7 Chief Investigator
Bayesian Analysis of Nonlinear Time Series NSC 82-0115-M-035-012-T 1993/4 - 1994/3 Chief Investigator