

Dong LI

CONTACT INFORMATION	Center for Statistical Science Wei Qing Bldg. 212C Tsinghua University	Office Tel.: +86-10-62780177 E-mail: malidong@tsinghua.edu.cn
RESEARCH INTERESTS	Financial econometrics, Nonlinear time series with applications, Social network and big data.	
WORKING EXPERIENCE	Associate Professor, Tsinghua University, 01/2017- present. Assistant Professor, Tsinghua University, 09/2013- 12/2016.	
EDUCATION	Ph.D., Hong Kong University of Science and Technology, 12/2010 <ul style="list-style-type: none">• Major in Statistics• Thesis Topic: <i>Statistical Inference for Some Threshold Models</i>• Adviser: Professor Shiqing LING M.S., Academy of Mathematics and Systems Science, CAS, 07/2005 B.S., Qufu Normal University, 07/2002	
RESEARCH EXPERIENCE	Post-doc Fellow Department of Mathematics, HKUST	02/2011 - 07/2011
	Post-doc Fellow Department of Statistics & Actuarial Science , University of Iowa	08/2011 - 02/2013
VISIT	Research Assistant Department of Mathematics, HKUST	09/2005 - 05/2006
	Visiting scholar Department of Statistics, London School of Economics and Political Science	05/2012
	Visiting scholar Department of Mathematics, HKUST	02/2013 - 08/2013
PUBLICATIONS	Li, D. , Guo, S. and Zhu, K. (2017). A double AR Model without intercept: an alternative to modeling nonstationarity and heteroscedasticity. <i>Econometric Reviews</i> . (accepted) Liu, F. , Li, D. and Kang, X.M. (2017). Sample path properties of an explosive double autoregressive model. <i>Econometric Reviews</i> . (accepted) Li, D. and Tong, H. (2016). Nested sub-sample search algorithm for estimation of threshold models. <i>Statistica Sinica</i> . 26 , 1543–1554. Li, D. , Ling, S. and Zhang, R. M. (2016). On a threshold double autoregressive model. <i>Journal of Business & Economic Statistics</i> 34 , 68–80. Li, D. , Ling, S. and Zakoïan, J-M.(2015). Asymptotic inference in multiple-threshold double autoregressive models. <i>Journal of Econometrics</i> 189 , 415–427. Li, D. , Li, M. and Wu, W. (2014). On dynamics of volatilities in nonstationary GARCH models. <i>Statistics & Probability Letters</i> 94 , 86–90. Chen, M., Li, D. and Ling, S. (2014). Nonstationarity and quasi-maximum likelihood estimation on a double autoregressive model. <i>Journal of Time Series Analysis</i> 35 , 189–202.	

- Chan, K.S., **Li, D.**, Ling, S. and Tong, H. (2014). On conditionally heteroscedastic AR models with thresholds. *Statistica Sinica* **24**, 625–652.
- Li, D.** (2014). Weak convergence of the sequential empirical processes of residuals in TAR models. *Science China: Mathematics* **57**, 173–180.
- Li, D.**, Chan, K.S. and Schiling, K.E. (2013). Nitrate concentration trends in Iowa’s rivers, 1998 to 2012: What challenges await nutrient reduction initiatives? *Journal of Environmental Quality*, **42** 1822–1828.
- Li, D.**, Ling, S. and Li, W.K. (2013). Asymptotic theory on the least squares estimation of threshold moving-average models. *Econometric Theory*, **29** 482-516.
- Wu,W.Q., **Li, D.**, Pan, S. and Chen, M. (2013). Three-regime mean reversion, TAR and its applications. *Systems Engineering - Theory & Practice*, **33** 901-909.
- Li, D.** and Ling, S. (2012). On the least squares estimation of multiple-regime threshold autoregressive models. *Journal of Econometrics*, **167** 240-253.
- Li, D.** (2012). A note on moving-average models with feedback. *Journal of Time Series Analysis*, **33** 873-879.
- Li, D.**, Ling, S. and Tong, H. (2012). On moving-average models with feedback. *Bernoulli*, **18** 735-745.
- Li, D.**, Li, W.K. and Ling, S. (2011). On the least squares estimation of threshold ARMA models. *Statistics and its Interface*, **4** 183-196.
- Ling, S. and **Li, D.** (2008). Asymptotic inference for a nonstationary double AR(1) model. *Biometrika*, **95** 257-263.
- Ling, S., Tong, H. and **Li, D.** (2007). Ergodicity and invertibility of threshold moving-average models. *Bernoulli*, **13** 161-168.
- Li, D.** and Wu, W.Q. (2016). Renorming volatilities in a family of GARCH models.
- Li, D.**, Ling, S. and Zhu, K. (2016). ZD-GARCH model: a new way to study heteroscedasticity.
- Li, D.** (2016). Smooth transition moving-average models: estimation and testing.
- Guo, S., **Li, D.** and Li, M. (2016). Robust inference in a double AR model.
- Li, D.** and Zhu, K. (2016). A new ZD-GJR model for asymmetric and heavy-tailed nonstationarity.
- Li, D.**, Ling, S. and Yang, G. R. (2016). Bridging compound Poisson processes and Brownian motions with applications to threshold models.
- Chow, J., **Li, D.**, Pan, R. and Wang, H.S. (2016). Network GARCH model.

SUBMITTED
PAPERS

MANUSCRIPTS

- Asymptotic theory for the quasi-maximum likelihood estimation in AR models with nonstationary GARCH errors.
- Smooth bootstrap for TMA models.
- Least squares estimation of continuous TARMA models.
- Maximum likelihood estimation for α -stable TAR models.
- Estimation in closed-loop threshold autoregressive models.

Asymptotic theory for the QMLE in GARCH-M models.

Asymptotic inference in GJR-GARCH-X models with stationary and nonstationary covariates.

On the LSE of partially continuous TAR models

TEACHING

Courses taught:

- Multivariate Statistical Analysis (2014,2015/Spring)(Graduate level)
- Advanced Mathematical Statistics (2014, 2015/Fall)(Graduate level)
- Cases and Statistical Studies (2014, 2015/Fall, with other 4 instructors)(Graduate level)
- Probability (2014/Summer)(Undergraduate level)
- Probability and Statistics (2015/Summer)(Undergraduate level)
- Elementary Probability (2016/Fall)(Undergraduate level for minor degree)
- Advanced Probability I (2016/Fall)(Graduate level)
- Time Series Analysis (2017/Spring)(Graduate level)
- Applied Time Series Analysis (2017/Spring)(Undergraduate level)

SERVICE

- *Council member of Beijing Applied Statistic Association (2015-)*

FUND

- NSFC (No. 11401337, PI), RMB¥220,000, Time: 01/2015 - 12/2017.
- NSFC (No. 11471183, Participant), Time: 01/2015 - 12/2018.
- NSFC (No. 11571348, Principal Participant), RMB¥30,000, Time: 01/2016 - 12/2019.

ORGANIZING
CONFERENCE

- Co-organizer, the international conference on Time Series Econometrics, Dec. 18-20, 2015. (with Shiqing Ling and Chuanzhong Chen)
- Co-organizer, 2016 Tsinghua Symposium on Statistics and Data Science for Young Scholars, Dec. 9-11, 2016. (with Ke Deng and Lin Hou)
- Organizer, Mini workshop on Big Data and Internet Finance, Dec. 18, 2106.

JOURNAL
REVIEWING

- *Applied Stochastic Models in Business and Industry*
- *Annals of Statistics*
- *Biometrika*
- *Colombian Journal of Statistics*
- *Communications in Statistics - Simulation and Computation*
- *Computational Statistics & Data Analysis*
- *European Journal of Industrial Engineering*
- *Econometric Theory*
- *Journal of Econometrics*
- *Journal of the Korean Statistical Society*
- *Journal of Risk and Financial Management*
- *Metrika*
- *Statistica Sinica*

- *Stochastic Environmental Research and Risk Assessment*
- *Statistics & Probability Letters*
- *Test*

(INVITED) TALKS
IN CONFERENCES
AND SEMINARS

- The 2016 Symposium on Modern Statistics at Xiamen University, 24-25/12/2016.*
- Statistics with Applications for Young Scholars at Capital Normal University, Beijing, 2-4/12/2016.*
- Symposium on Statistics for Young Scholars at Nankai University, Tianjin, 11-13/11/2016.*
- The Third Guanghua Time Series Forum, Peking University at Xi'an, 1-5/08/2016.*
- The Third Taihu International Statistics Forum, Shanghai, 9-11/07/2016.*
- The 2015 Symposium on Modern Statistics at Xiamen University, 25-27/12/2015.*
- The international workshop on Time Series Econometrics at Tsinghua-Sanya Mathematical Forum, 18-20/12/2015.*
- The Second Guanghua Time Series Forum, Peking University at Xi'an, 2-7/08/2015.*
- The 5th IMA-China International Conference on Statistics and Probability, Yunnan University, 1-3/07/2015.*
- 2015 Tsinghua Summer Workshop on Modern Statistics, Tsinghua University, 22-26/06/2015.*
- The First Colloquium on Statistical Science For Young Researchers, SJTU, 19-21/06/2015.*
- Workshop on applied statistics, Jilin University, 9-12/01/2015.*
- Big Data: Opportunities, Challenges and Innovations, Tsinghua Sanya International Mathematics Forum, 27-30/12/2014.*
- The First Guanghua Time Series Forum at Peking University, 18-22/08/2014.*
- The 7th Financial Engineering and Risk Management International Symposium, 27-28/06/2014, Central University of Finance and Economics, China.*
- The workshop on Chinese statistics, 22-24/11/2013, Chinese Academy of Sciences.*
- An International Conference in Honour of Professor W.K. Li at HKUST—Frontiers of Time Series Analysis and Related Fields, 26-27/07/2013.*
- National University of Singapore, 29/02/2012.*
- Business School, Monash University, Australia, 25/02/2011.*
- Recent Advances in Nonlinear Time Series Analysis, the Institute of Mathematical Science, National University of Singapore, 7-18/02/2011.*
- School of Business, Remin University of China, 29/06/2010.*
- Proceedings of the Sixth Chinese Symposium on Limit Theory in Probability And Large Sample Theory in Statistics, Luoyang, Henan Province, China, 7-9/11/2009.*