

Dr. Zhuo-Song Zhang

BASIC INFORMATION

- School of Mathematics and Statistics, University of Melbourne, Parville, VIC, 3010, Australia
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EDUCATION

The Chinese University of Hong Kong, Hong Kong

- Ph.D. in Statistics
• Supervisor: Prof. Qi-Man, Shao.

Aug 2013 – Jul 2017

Wuhan University, China

- B.S. in Statistics.

Sep 2009 – Jun 2013

RESEARCH EXPERIENCE

Stanford University, Statistics Department

- Visiting Student Researcher
• Adviser: Prof. Sourav Chatterjee.

Jul 2016 – Aug 2016

Melbourne University, School of Mathematics and Statistics

- Research Fellow in statistics
• Adviser: Prof. Aurore Delaigle.

Aug 2017 – present

RESEARCH INTERESTS

Asymptotic theory in probability and statistics; Stein's method; Functional data analysis; Nonparametric statistics.

PUBLICATIONS

- [1] Q.-M. Shao and Z.-S. Zhang. (2016). "Identifying the limiting distribution by a general approach of Stein's method", *Sci. China Math.*, vol. 59, Issue 12, pp. 2379–2392.
- [2] Q.-M. Shao and Z.-S. Zhang. (2019). "Berry–Esseen bounds of normal and nonnormal approximation for unbounded exchangeable pairs", *Ann. Probab.*, vol. 47, Number 1, pp. 61–108.

SUBMITTED PAPERS

- [1] Q.-M. Shao, M.-C. Zhang and Z.-S. Zhang, "Cramér-type moderate deviations for non-normal approximation". Submitted to *Ann. Probab.*

WORKING PAPERS

- [1] Z.-S. Zhang, "Berry–Esseen bound for non-linear multivariate statistics".
- [2] Q.-M. Shao, and Z.-S. Zhang, "Cramér-type moderate deviations for unbounded exchangeable pairs".
- [3] A. Delaigle, D. Dutta and Z.-S. Zhang, "Reconstructing fragmented functional data by Markov chains".
- [4] X. Fang and Z.-S. Zhang, "Moderate deviations in the local limit theorems".
- [5] A. Delaigle and Z.-S. Zhang, "Reconstructing functional data by nonparametric methods".
- [6] P. Hall, A. Delaigle and Z.-S. Zhang, "Effects of dependence on estimators of mean and covariance for functional data".

INVITED PRESENTATIONS	[1] <i>Stein's method and related topics</i> , University of Macau, Dec 2018.
	[2] <i>The 5th Institute of Mathematical Statistics Asia Pacific Rim Meeting</i> , The National University of Singapore, Singapore, Jun 2018.
	[3] <i>2017 IMS-China International Conference on Statistics and Probability</i> , Guangxi University For Nationalities, Nanning, China, Jun 2017
	[4] <i>The 10th ICSA international conference</i> , Shanghai Jiao Tong University, Shanghai, China, Dec 2016.
	[5] <i>The International Symposium on Probability Theory and Related Fields</i> , Southern University of Science and Technology, Shenzhen, China, Nov 2016.
	[6] <i>The 4th Institute of Mathematical Statistics Asia Pacific Rim Meeting</i> , The Chinese University of Hong Kong, HK, Jun 2016.
AWARDS & SCHOLARSHIPS	<ul style="list-style-type: none"> ▪ Overseas Research Award, 2015–2016 Department of Statistics, The Chinese University of Hong Kong ▪ Nominee of Global Young Scientists Summit 2015, 2014–2015 Science Faculty, The Chinese University of Hong Kong ▪ Wuhan University Outstanding Graduate student, 2013 ▪ National motivational scholarships, 2011 ▪ Wuhan University Outstanding students scholarship, 2011 ▪ Wuhan University Excellent student, 2011
PROFESSIONAL SERVICES	REVIEWERS Journals: Bernoulli, Probability in the Engineering and Informational Sciences
SUPERVISION EXPERIENCE	PHD STUDENTS Mr. Debajit Dutta, PhD student Co-supervisor of his thesis work on “fragmented functional data”.
TEACHING	<ul style="list-style-type: none"> ▪ Fall 2018, MAST90123, Advanced Mathematical Statistics, University of Melbourne
TEACHING ASSISTANT	<ul style="list-style-type: none"> ▪ Fall 2013, STAT 2001 A/B, Basic Concepts in Probability and Statistics I ▪ Spring 2014, STAT 2006 A/B, Basic Concepts in Probability and Statistics II ▪ Fall 2014, STAT 5005, Advanced Probability Theory ▪ Spring 2015, STAT 4003, Statistical Inference ▪ Fall 2015, STAT 5005, Advanced Probability Theory ▪ Fall 2015, RMSC 5001, Advanced Statistical Theory in Risk Management ▪ Spring 2016, RMSC 4001, Simulation Methods for Risk Management Science and Finance ▪ Fall 2016, STAT 3210, Statistical Techniques in Life Sciences