

Dr. Zhuo-Song Zhang

BASIC INFORMATION	<ul style="list-style-type: none">Department of Statistics and Applied ProbabilityEmail: stazz@nus.edu.sg
EDUCATION	<p>The Chinese University of Hong Kong, Hong Kong</p> <ul style="list-style-type: none">Ph.D. in Statistics Aug 2013 – Jul 2017<ul style="list-style-type: none">Supervisor: Prof. Qi-Man Shao. <p>Wuhan University, China</p> <ul style="list-style-type: none">B.S. in Statistics. Sep 2009 – Jun 2013
RESEARCH EXPERIENCE	<p>Stanford University, Statistics Department</p> <ul style="list-style-type: none">Visiting Student Researcher Jul 2016 – Aug 2016<ul style="list-style-type: none">Adviser: Prof. Sourav Chatterjee. <p>Melbourne University, School of Mathematics and Statistics</p> <ul style="list-style-type: none">Research Fellow in statistics Aug 2017 – Jun 2019 <p>National University of Singapore, Department of Statistics and Applied Probability</p> <ul style="list-style-type: none">Research Fellow Jul 2019 – present<ul style="list-style-type: none">Adviser: Prof. Adrian Roellin.
RESEARCH INTERESTS	Asymptotic theory in probability and statistics; Stein's method; Functional data analysis; Nonparametric statistics.
PUBLICATIONS	<p>[1] Q.-M. Shao and Z.-S. Zhang. (2016). "Identifying the limiting distribution by a general approach of Stein's method", <i>Sci. China Math.</i>, vol. 59, Issue 12, pp. 2379–2392.</p> <p>[2] Q.-M. Shao and Z.-S. Zhang. (2019). "Berry–Esseen bounds of Normal and non-normal approximation for unbounded exchangeable pairs", <i>Ann. Proba.</i>, vol. 47, No. 1, pp. 61–108.</p>
SUBMITTED PAPERS	<p>[1] Q.-M. Shao, M.-C. Zhang and Z.-S. Zhang, "Cramér-type moderate deviations for non-normal approximation". Available at ArXiv: 1809.07966. Submitted to Ann. Probab.</p> <p>[2] Z.-S. Zhang, "Cramér-type moderate deviations of normal approximation for exchangeable pairs". Available at ArXiv: 1901.09526.</p>
WORKING PAPERS	<p>[1] Z.-S. Zhang, "Berry-Esseen bound for non-linear multivariate statistics".</p> <p>[2] A. Delaigle, D. Dutta and Z.-S. Zhang, "Reconstructing fragmented functional data by Markov chains".</p> <p>[3] X. Fang and Z.-S. Zhang, "Moderate deviations in the local limit theorems".</p> <p>[4] A. Delaigle and Z.-S. Zhang, "Reconstructing functional data by nonparametric methods".</p> <p>[5] P. Hall, A. Delaigle and Z.-S. Zhang, "Effects of dependence on estimators of mean and covariance for functional data".</p>

**INVITED
PRESENTATIONS**

- [1] *Stein's Method and Related Topics*, University of Macau, Macau, China, Dec 2018.
- [2] *The 5th Institute of Mathematical Statistics Asia Pacific Rim Meeting*, The National University of Singapore, Singapore, Jun 2018.
- [3] *2017 IMS-China International Conference on Statistics and Probability*, Guangxi University For Nationalities, Nanning, China, Jun 2017
- [4] *The 10th ICSA international conference*, Shanghai Jiao Tong University, Shanghai, China, Dec 2016.
- [5] *The International Symposium on Probability Theory and Related Fields*, Southern University of Science and Technology, Shenzhen, China, Nov 2016.
- [6] *The 4th Institute of Mathematical Statistics Asia Pacific Rim Meeting*, The Chinese University of Hong Kong, HK, Jun 2016.

**AWARDS &
SCHOLARSHIPS**

- 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

- Fall 2018, MAST90123, Advanced Mathematical Statistics, University of Melbourne

**TEACHING
ASSISTANT**

- 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