

Jiixin QIU

PhD Candidate in Statistics

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🎓 EDUCATION

The University of Hong Kong

PhD Candidate in Statistics (Joint Program with SUSTech)

Supervisors: Prof. [Jianfeng \(Jeff\) Yao](#) (CUHK-SZ) & Prof. [Zeng Li](#) (SUSTech)

📍 Hong Kong, China

Sep. 2020 – Jun. 2024 (Expected)

Harbin Institute of Technology

M.Sc. in Statistics (Joint Program with SUSTech)

Supervisor: Prof. [Guo-Liang Tian](#)

📍 Harbin, China

Sep. 2018 – Jun. 2020

Southern University of Science and Technology

B.Sc. in Mathematics

📍 Shenzhen, China

Sep. 2014 – Jun. 2018

🔪 RESEARCH INTERESTS

- Random Matrix Theory
- High-dimensional Statistics

📖 PUBLICATIONS/MANUSCRIPTS

Publications & Preprints

[*: corresponding author]

1. **Jiixin Qiu**, Zeng Li*, Jianfeng Yao (2023). Asymptotic normality for eigenvalue statistics of a general sample covariance matrix when $p/n \rightarrow \infty$ and applications. *The Annals of Statistics*, 51(3): 1427-1451. DOI: [10.1214/23-AOS2300](https://doi.org/10.1214/23-AOS2300)
2. Zhanting Long, Zeng Li*, Ruitao Lin, **Jiixin Qiu** (2023). On singular values of large dimensional lag- τ sample auto-correlation matrices. *Journal of Multivariate Analysis*, 197. DOI: [10.1016/j.jmva.2023.105205](https://doi.org/10.1016/j.jmva.2023.105205)
3. **Jiixin Qiu**, Zeng Li*, Jianfeng Yao (2023+). Robust estimation for number of factors in high dimensional factor modeling via Spearman correlation matrix. *Submitted*. [arXiv:2309.00870](https://arxiv.org/abs/2309.00870).
4. Qianqian Jiang, **Jiixin Qiu**, Zeng Li* (2023+). On eigenvalues of sample covariance matrices based on high-dimensional compositional data. *Submitted*. [arXiv:2312.14420](https://arxiv.org/abs/2312.14420).

Working Papers

1. **Jiixin Qiu**, Zeng Li, Jianfeng Yao (2023+). On spiked eigenvalues of general sample covariance matrices under extreme aspect ratio. *Manuscript*.

📖 PRESENTATIONS

- (Poster) "Robust estimation for number of factors in high dimensional factor modeling via Spearman correlation matrix", [RMTA2023](#), Shenzhen, China, June 2023

🏆 AWARDS & HONORS

China Undergraduate Mathematical Contest in Modeling: the 3rd Prize	2017
The Chinese Mathematics Competitions (CMC): the 2nd Prize	2017
Excellent Freshman Scholarship the 1st Prize (5%)	Nov. 2014
University Scholarship	2014–2017
Excellent Student Scholarship (20%)	Oct. 2017
Excellent Undergraduate Thesis (10%)	Jun. 2018

Courses at HKU

- (STAT6010/7610) Advanced Probability
(2023, Course by Prof. Marius Hofert)
- (STAT2601) Probability and Statistics I
(2 times TA in 2021 and 2024, Course by Dr. K.P., WAT)

Courses at SUSTech

- (STA5001) High Dimensional Statistics
(2 times TA in 2022 & 2023, Course by Prof. Zeng Li)
- (MAT7102/MAT412) Selected Research Topics in Statistics
(2020, Course by Prof. Qi-Man Shao)
- (MA308) Statistical Computation and Software
(2020, Course by Prof. Zeng Li)
- (MA103A) Linear Algebra A
(2 times TA in 2018 and 2019; Course by Prof. Jiagang Yang, Prof. Yimao Chen)

SKILLS

Programming: R, Julia, Python, MATLAB

Technologies: L^AT_EX, Git