

Name: Fei Shi

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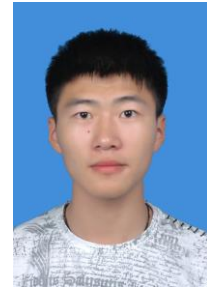
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Google Scholar:

<https://scholar.google.com/citations?user=7GuQwWQAAAAJ&hl=en>



## Education

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2022-now	Postdoc	Department of Computer Science, The University of Hong Kong
		Advisors: Qi Zhao      Personal page: <a href="https://qizhao-quantum.github.io/">https://qizhao-quantum.github.io/</a> and Giulio Chiribella      Personal page: <a href="https://www.cs.hku.hk/~giulio">https://www.cs.hku.hk/~giulio</a>
2018-2022	Ph.D.	School of Cyber Science and Technology, University of Science and Technology of China
		Advisor: Xiande Zhang      Personal page: <a href="http://staff.ustc.edu.cn/~drzhang/">http://staff.ustc.edu.cn/~drzhang/</a>
2017-2018	Master	School of Mathematical Sciences, University of Science and Technology of China
2013-2017	B.S.	School of Mathematics and Information Science, Guangzhou University

## Research Areas

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Quantum information, quantum computing, and combinatorics

## Publications

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1. **Fei Shi**, Mao-Sheng Li, Xiande Zhang, and Qi Zhao, Unextendible and uncompletable product bases in every bipartition, *arXiv:2207.04763* (2022).
2. **Fei Shi**, Yi Shen, Lin Chen, and Xiande Zhang,  $k$ -Uniform states in heterogeneous systems, *IEEE Transactions on Information Theory* 68(5), 3115-3129 (2022).
3. **Fei Shi**, Zuo Ye, Lin Chen, and Xiande Zhang, Strong quantum nonlocality in  $N$ -partite systems, *Physical Review A* 105, 022209 (2022).
4. **Fei Shi**, Mao-Sheng Li, Mengyao Hu, Lin Chen, Man-Hong Yung, Yan-Ling Wang, and Xiande Zhang, Strongly nonlocal unextendible product bases do exist, *Quantum* 6, 619 (2022).
5. Mao-Sheng Li, **Fei Shi**, Yan-Ling Wang, Local discrimination of generalized Bell states via commutativity, *Physical Review A* 105, 032455 (2022).
6. **Fei Shi**, Mao-Sheng Li, Lin Chen, and Xiande Zhang,  $k$ -uniform quantum information masking, *Physical Review A* 104, 032601 (2021).
7. **Fei Shi**, Mao-Sheng Li, Lin Chen, and Xiande Zhang, Strong quantum nonlocality for unextendible product bases in heterogeneous systems, *Journal of Physics A: Mathematical and Theoretical* 55, 015305 (2021).
8. **Fei Shi**, Mao-Sheng Li, Mengyao Hu, Lin Chen, Man-Hong Yung, Yan-Ling Wang, and Xiande Zhang, Strong quantum nonlocality from hypercubes, *arXiv:2110.08461*(2021).
9. Yiwei Zhang, **Fei Shi**, Xiande Zhang, Yiting Yang, and Gennian Ge, New results on unextendible product bases, *SCIENTIA SINICA Mathematica* 51, 11 (2021).

10. Mao-Sheng Li, Yan-Ling Wang, **Fei Shi**, and Man-Hong Yung, Local distinguishability based genuinely quantum nonlocality without entanglement, *Journal of Physics A: Mathematical and Theoretical* 54, 445301, (2021).
11. **Fei Shi**, Mengyao Hu, Lin Chen, and Xiande Zhang, Strong quantum nonlocality with entanglement, *Physical Review A* 102, 042202 (2020).
12. **Fei Shi**, Xiande Zhang, and Lin Chen, Unextendible product bases from tile structures and their local entanglement-assisted distinguishability, *Physical Review A* 101, 062329 (2020).
13. **Fei Shi**, Yi Shen, Lin Chen, and Xiande Zhang, Bounds on the number of mutually unbiased entangled bases, *Quantum Information Processing* 19(10), 383 (2020).
14. **Fei Shi**, Xiande Zhang, and Yu Guo, Constructions of unextendible entangled bases, *Quantum Information Processing* 18(10), 324 (2019).

## Awards

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- 2021 National Scholarship for Doctoral Students, China  
2020 Scholarship of Outstanding Student, USTC  
2016 National Scholarship for Undergraduate Students, China

## Conference/ Colloquium Talks

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- Jul 2022 Invited Colloquium talk, Guangdong University of Technology,  
*Unextendible and uncompletable product bases in every bipartition*
- Jan 2021 Invited Colloquium talk, South China University of Technology,  
*Strong quantum nonlocality with entanglement*
- Aug 2020 Invited Colloquium talk, Soochow University,  
*Constructions of  $k$ -uniform states from mixed orthogonal arrays*
- Jul 2019 Conference on the fifth seminar for young scholars in quantum physics, Xian

## Teaching Experience

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- Spring 2019 USTC Teaching assistant of Linear Algebra

## Referee for Journals

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- Quantum  
IEEE Transactions on Information Theory  
Physical Review A  
Journal of Physics A: Mathematical and Theoretical