

# Yadong Wu

Office Address Chow Yei Ching Building, The University of Hong Kong, Pokfulam, Hong Kong  
Email [yadongwu@hku.hk](mailto:yadongwu@hku.hk)  
Nationality China  
Gender Male  
Marital status Married  
ORCID <https://orcid.org/0000-0002-9940-6128>  
Google scholar Yadong's Google scholar profile

## EMPLOYMENT

Jan. 2020 – Now Postdoctoral fellow  
Computer science department, University of Hong Kong, Hong Kong  
Supervisor: Prof. Giulio Chiribella

## EDUCATION

Sep. 2015 – Nov. 2019 Ph.D., Physics (Ph.D. thesis passed with no revision)  
University of Calgary, Canada  
Supervisor: Prof. Barry C. Sanders  
Sep. 2012 – Mar. 2015 M.S.E., Electronics Science and Technology  
University of Michigan-Shanghai Jiao Tong University  
Joint Institute, China  
Mar. 2010 – Aug. 2012 Second B.S., Mathematics and Applied Mathematics  
Shanghai Jiao Tong University, China  
Sep. 2008 – Aug. 2012 B.S.E., Electrical and Computer Engineering  
University of Michigan-Shanghai Jiao Tong University  
Joint Institute, China

## VISITING

Apr. 2019 – Aug. 2019 Shanghai Branch, National Laboratory for Physical Sciences at Microscale,  
University of Science and Technology of China, Shanghai

## PUBLICATIONS (hyperlinks are contained)

### Journal Publications

- (1) [Ya-Dong Wu](#), Ge Bai, Giulio Chiribella, and Nana Liu, “Efficient verification of continuous-variable quantum states and devices without assuming identical and independent operations”, *Physical Review Letters* **126**, 240503, 2021.
- (2) Chen Qian, [Ya-Dong Wu](#), Yunlong Xiao, Barry C. Sanders, “Multiple uncertainty relation for accelerated quantum information”, *Physical Review D*, **102**, 096009, 2020.

- (3) Mahnaz Jafarzadeh, Ya-Dong Wu (co-first author), Yuval R. Sanders, Barry C. Sanders, “Randomized benchmarking for qudit Clifford gates”, *New Journal of Physics* **22**, 063014 (14 pp.), 2020.
- (4) Ya-Dong Wu, Barry C. Sanders, “Efficient verification of bosonic quantum channels via benchmarking”, *New Journal of Physics* **21**, 073026 (21 pp.), 2019.
- (5) Ya-Dong Wu, Abdullah Khalid, Barry C. Sanders, “Efficient Code for Relativistic Quantum Summoning”, *New Journal of Physics* **20**, 063052 (18 pp.), 2018.
- (6) Mehdi Ahmadi, Ya-Dong Wu, Barry C. Sanders, “Relativistic (2,3)-threshold quantum secret sharing”, *Physical Review D* **96**, 065018 (10 pp.), 2017.
- (7) Yadong Wu, Jian Zhou, Xinbao Gong, Ying Guo, Zhi-Ming Zhang, Guangqiang He, “Continuous-variable measurement-device-independent multipartite communication”, *Physical Review A* **93**, 022325 (9 pp.), 2016.
- (8) Yadong Wu, Runze Cai, Guangqiang He, Jun Zhang, “Quantum secret sharing with continuous variable graph state”, *Quantum Information Processing* **13**, 1085-1102, 2014.

#### Preprint

- (8) Ge Bai, Ya-Dong Wu, Yan Zhu, Masahito Hayashi, Giulio Chiribella, “Efficient Algorithms for Causal Order Discovery in Quantum Networks”, arXiv2012.01731.

## PRESENTATIONS

#### Invited talks

- (1) Ya-Dong Wu, “Efficient code for quantum summoning” The quantum information structure of spacetime HKU workshop, Hong Kong, Jan. 13-17, 2020.
- (2) Barry C. Sanders, Ya-Dong Wu, Mahnaz Jafarzadeh, Yuval R. Sanders, “Randomized benchmarking for qudit Clifford gates”, Workshop on quantum information, quantum computing and quantum control, Shanghai University, Jan. 3-5, 2020.

#### Conference contributed talks

- (1) Ya-Dong Wu, Ge Bai, Giulio Chiribella, Nana Liu, “Efficient verification of continuous-variable quantum states and quantum devices beyond independent and identical assumption”, *Beyond IID in Information Theory*, online, Nov. 9-13, 2020.
- (2) Ya-Dong Wu, Barry C. Sanders, “Efficient verification of bosonic quantum channels via benchmarking”, *Asian Quantum Information and Science Conference*, Seoul, Aug. 19-23, 2019.
- (3) Ya-Dong Wu, Barry C. Sanders, “Efficient verification of bosonic quantum channels via benchmarking”, *Mini-Workshop on Quantum Verification*, Fudan University, Shanghai, Aug. 16-17, 2019.
- (4) Yadong Wu, Abdullah Khalid, Masoud H. Davijani, Barry C. Sanders, “Spacetime replication of quantum information with (2,3) quantum secret sharing and teleportation”, *APS March Meeting*, New Orleans, Mar. 2017.

#### Invited Seminar talks

- (1) Ya-Dong Wu, “Efficient verification of bosonic quantum channels”, *Quantum computation research center, Peng Cheng Lab, Shenzhen*, July 2019.

- (2) Ya-Dong Wu, “Efficient verification of bosonic quantum channels”, Fujian key lab of quantum information and quantum optics, Fuzhou University, Fuzhou, May 2019.

## AWARDS

- 2017-2019, Awarded Departmental Graduate Student Excellence Award, by University of Calgary.
- 2010, Awarded academic excellence scholarship (third-class), by Shanghai Jiao Tong University.
- 2010, Awarded the first-class prize in Contemporary Undergraduate Mathematical Contest in Modeling, Shanghai.

## TEACHING

- 2015-2018, Teaching assistant: Optics & Electromagnetism; Introductory Electromagnetism and Thermal Physics; Mechanics, University of Calgary.
- 2010-2012, Teaching assistant: Differential Equations and Complex Analysis; Introduction to Circuits; Discrete Mathematics, Shanghai Jiao Tong University.

## ACADEMIC SERVICES

- 2018-2019, Referee for Journal of Physics A, Physica Scripta.
- 2016-2017, Volunteer of the Conference on Quantum Information Processing, Seattle and Banff.