

Applying for

Post Doc in quantum computing/quantum error correction

Education

Sept.2015-present Ph.D. in Physics University of California, Riverside (UCR)
(expected to be granted on Sept 2020, master degree granted in 2017)
Interest: quantum error correction, quantum computing, condensed matter physics
Advisor: Leonid Pryadko (<http://faculty.ucr.edu/~leonid/>)

Sept.2010-Jul.2015 Bachelor in Physics Shanghai Jiao Tong University, China (SJTU)

Publications

Weilei Zeng and L.P. Pryadko, *Higher-dimensional quantum hypergraph-product codes*. Phys. Rev. Lett. 122, 230501 (2019).<https://doi.org/10.1103/PhysRevLett.122.230501>

Weilei Zeng, A. Ashikhmin, M. Woolls, and L. P. Pryadko, *Quantum convolutional data-syndrome codes* in 2019 IEEE 20th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC) (2019) pp. 1–5. <http://dx.doi.org/10.1109/SPAWC.2019.8815487>

Research Interest

Quantum error correction is essential for scalable fault-tolerant quantum computation. As NISQ devices become more promising, It is practical to improve them by implementing QEC technique. My work involves the generalization of surface codes and others, characterization of noise channel, decoding and simulations.

Working/Intern Experience

Jun.2019 – Aug. 2019 Summer Intern at Peng Cheng Lab, Shenzhen, China, working on quantum computing

Jun.2018 – Aug. 2018 Summer Intern at Nokia Bell Labs, working on quantum information

Aug. 2013 Programmer Intern (C#, Unity3D), Pearl Digital Entertainment, Shanghai, China

Academic Events

Aug.2019 QAS 2019, Shenzhen, China, poster presented.

Aug.2019 1st Student Conference on Quantum Computing(SCQC), Shenzhen, committee chair

July.2019 QEC 2019, London, UK, poster presented.

Mar.2019 APS March Meeting 2019, Boston

Oct.2018 The 2018 Annual Meeting of the APS Far West Section, Cal State Fullerton, CA

Aug.2017 Invited Speech in 90kmiles, Shanhai, China

Jun.2017 E3 2017, LA

Aug.2015 TeV Experimental Physics Summer School, Shandong University, China

Jul.2014 Summer School in Department of Physics, Tsinghua University, China

Programming languages and softwares

Skilled in Python, C++, C, Matlab, Java, Latex

Familiar with C#, Unity3D, R, Maple, Mathematica, Fortran