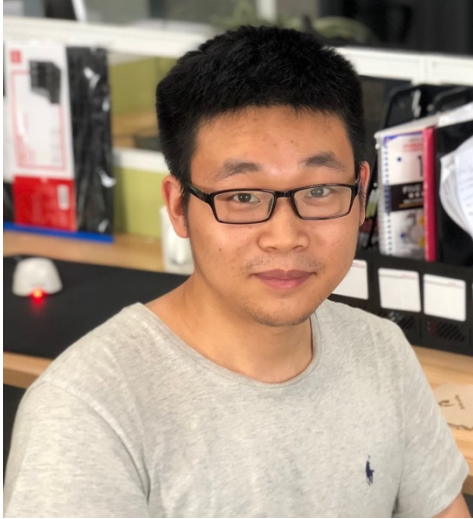




HARVARD UNIVERSITY
17 Oxford Street
Cambridge, MA 02138

Mathematical Picture Language Seminar



Tuesday,
May 9, 2023
9:30 a.m. Boston time

Kaifeng Bu
Harvard University

Magic from a Quantum Convolutional Approach

Abstract: Stabilizer states and Clifford unitaries have played important roles in quantum information and computation, such as quantum error correcting code and measurement-based quantum computation. In this work, I will introduce a convolutional framework to study stabilizer states and channels based on qudits. Moreover, we establish a quantum central limit theorem, based on iterating the convolution of a quantum state, and show this converges to a stabilizer state. This talk is based on the joint work with Weichen Gu, and Arthur Jaffe (arXiv:2302.07841, 2302.08423).



Zoom QR Code & Link:

<https://harvard.zoom.us/j/779283357?pwd=MitXVm1pYUIJVzZqT3lwV2pCT1ZUQTog>

<https://mathpicture.fas.harvard.edu/seminar>