



HARVARD UNIVERSITY  
17 Oxford Street  
Cambridge, MA 02138

# Mathematical Picture Language Seminar



**Tuesday, April 8**

**4:30p.m. Boston time**

**Jefferson 256 and Zoom**

**Zhengwei Liu**

**Tsinghua University**

## Alterfold Theory and Entanglement Entropy

**Abstract:** We will present new insights in alterfold theory to study entanglement entropy. We illustrate these insights by computing the entanglement entropy for thermal quantum pure states on surface codes at finite temperature. Furthermore, we propose an entanglement rank conjecture for thermal quantum pure states on generalized Levin-Wen models in any dimension. It is based on joint work with Z. Zhao, arXiv preprint to appear.



Zoom QR Code & Link:

<https://harvard.zoom.us/j/779283357?pwd=MitXVm1pYUJlVzZqT3lwV2pCT1ZUQTog>

Passcode: 657361

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