

Yaodong Li

Postdoctoral Scholar, Physics

Bio

PROFESSIONAL EDUCATION

- PhD, University of California, Santa Barbara (2022)
- BSc, Fudan University (2016)

STANFORD ADVISORS

- Vedika Khemani, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Low-Density Parity-Check Stabilizer Codes as Gapped Quantum Phases: Stability under Graph-Local Perturbations** *PRX QUANTUM*
De Roeck, W., Khemani, V., Li, Y., O'Dea, N., Rakovszky, T.
2025; 6 (3)
- **Rare events and Griffiths phases in topological quantum error correction** *PHYSICAL REVIEW B*
Sriram, A., O'Dea, N., Li, Y., Rakovszky, T., Khemani, V.
2025; 111 (22)
- **Experimental Demonstration of Scalable Cross-Entropy Benchmarking to Detect Measurement-Induced Phase Transitions on a Superconducting Quantum Processor** *PHYSICAL REVIEW LETTERS*
Kamakari, H., Sun, J., Li, Y., Thio, J. J., Gujarati, T. P., Fisher, M. P. A., Motta, M., Minnich, A. J.
2025; 134 (12)
- **Perturbative Stability and Error-Correction Thresholds of Quantum Codes** *PRX QUANTUM*
Li, Y., O'Dea, N., Khemani, V.
2025; 6 (1)
- **Phase diagram of the three-dimensional subsystem toric code** *PHYSICAL REVIEW RESEARCH*
Li, Y., von Keyserlingk, C. W., Zhu, G., Jochym-O'Connor, T.
2024; 6 (4)
- **Continuous symmetry breaking in adaptive quantum dynamics** *PHYSICAL REVIEW B*
Hauser, J., Li, Y., Vijay, S., Fisher, M. P. A.
2024; 109 (21)
- **Statistical mechanics model for Clifford random tensor networks and monitored quantum circuits** *PHYSICAL REVIEW B*
Li, Y., Vasseur, R., Fisher, M. P. A., Ludwig, A. W. W.
2024; 109 (17)
- **Decodable hybrid dynamics of open quantum systems with Z2 symmetry** *PHYSICAL REVIEW B*
Li, Y., Fisher, M. P. A.
2023; 108 (21)
- **Operator Relaxation and the Optimal Depth of Classical Shadows.** *Physical review letters*
Ippoliti, M., Li, Y., Rakovszky, T., Khemani, V.

2023; 130 (23): 230403

- **Triviality of quantum trajectories close to a directed percolation transition** *PHYSICAL REVIEW B*
Piroli, L., Li, Y., Vasseur, R., Nahum, A.
2023; 107 (22)
- **Cross Entropy Benchmark for Measurement-Induced Phase Transitions.** *Physical review letters*
Li, Y., Zou, Y., Glorioso, P., Altman, E., Fisher, M. P.
2023; 130 (22): 220404
- **Entanglement Domain Walls in Monitored Quantum Circuits and the Directed Polymer in a Random Environment** *PRX QUANTUM*
Li, Y., Vijay, S., Fisher, M. P. A.
2022; 4 (1)
- **Entanglement phase transitions in random stabilizer tensor networks** *PHYSICAL REVIEW B*
Yang, Z., Li, Y., Fisher, M. P. A., Chen, X.
2022; 105 (10)
- **Conformal invariance and quantum nonlocality in critical hybrid circuits** *PHYSICAL REVIEW B*
Li, Y., Chen, X., Ludwig, A. W. W., Fisher, M. P. A.
2021; 104 (10)
- **Entanglement Negativity at Measurement-Induced Criticality** *PRX QUANTUM*
Sang, S., Li, Y., Zhou, T., Chen, X., Hsieh, T. H., Fisher, M. P. A.
2021; 2 (3)
- **Statistical mechanics of quantum error correcting codes** *PHYSICAL REVIEW B*
Li, Y., Fisher, M. P. A.
2021; 103 (10)
- **Emergent conformal symmetry in nonunitary random dynamics of free fermions** *PHYSICAL REVIEW RESEARCH*
Chen, X., Li, Y., Fisher, M. P. A., Lucas, A.
2020; 2 (3)
- **Measurement-driven entanglement transition in hybrid quantum circuits** *PHYSICAL REVIEW B*
Li, Y., Chen, X., Fisher, M. P. A.
2019; 100 (13)
- **Quantum Zeno effect and the many-body entanglement transition** *PHYSICAL REVIEW B*
Li, Y., Chen, X., Fisher, M. P. A.
2018; 98 (20)