

Milo Moses

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Department of Mathematics

Caltech

Pasadena, CA 91125

Education

- 2024 - PhD student in Mathematics; Caltech
(*mathematical physics, topological phases of matter*; advisor: *Alexei Kitaev*)
- 2022 - 2024 BS in Mathematics; UC Santa Barbara, College of Creative Studies

Industry experience

- 2026 Research intern at Logical Intelligence. Working on AI scientific capabilities, and some mathematical aspects of deep learning.
- 2025 Research intern at Microsoft Station Q. Developed technology for practical quantum error correction.
- 2023 Research intern at BEIT.tech. Led two mathematical projects focused on topological quantum computing.

Honors and awards

- 2026 “Resident” fellowship from The Residency
- 2025 Scott Russell Johnson Excellence in First-Year Graduate Studies Award
- 2024 Raymond L. Wilder award for “outstanding academic achievement in mathematics, as selected by the faculty”

Publications

- 2026 “An Algebraic Theory of Gapped Domain Wall Partons” with M. Buican, R. Geiko, and B. Shi, accepted at *Letters in Mathematical Physics*
- 2026 “Cliffords circuits over non-cyclic abelian groups” with J. Horecki, K. Deka, and J. Tulowiecki, accepted at *Quantum Information & Computation*

Selected Invited Talks

- 2026 Monte Verita workshop “*Quantum Topology meets Quantum Computation*”
- 2025 Tsinghua university workshop “*Theoretical Physics in Quantum Computation*”
- 2025 Colloquium speaker at CSU Northridge Physics department

Current service and leadership

- 2026 - Graduate student representative for the Caltech Academic Policies Committee.
- 2025 - Member of Caltech’s IQIM Seminar Committee
- 2025 - Co-founder and curator of graduate student quantum seminar series

References: David Aasen (Microsoft, david@aaasen.ca), Daniel Ranard (Caltech, danranard@gmail.com)