

## Milo Moses

milo@caltech.edu

Department of Mathematics

Caltech

Pasadena, CA 91125

### Education

2024 - PhD student in Mathematics; Caltech

2022 - 2024 BS in Mathematics (cum laude); UC Santa Barbara, College of Creative Studies

### Research experience in academia

2022 - 2024 Research assistant for Zhenghan Wang, UC Santa Barbara

*(topological quantum computing, property F conjecture on modular tensor categories)*

2022 Research assistant for Francesc Castella, UC Santa Barbara

*(p-adic L functions of modular forms, Iwasawa theory)*

2020 - 2021 Research assistant for Alan Hammond, UC Berkeley

*(combinatorics, computational mathematics)*

### Industry experience

2023 Quantum computing intern at BEIT. Led projects focused on the mathematical, physical, and computational aspects of quantum error correction

### Teaching

2023 Teaching Assistant at the Euler Circle, for “Fundamentals of Mathematics”

2023 Course Assistant for “p-adic analysis”, at UC Santa Barbara

### Academic/scientific recognition

2024 UCSB Department of Mathematics Raymond L. Wilder Award

2020 Mu Alpha Theta prize winner in Alameda County Science and Engineering fair

### Talks and conferences

2024 Attended the Perimeter institute workshop on “*Higher categorical tools for quantum phases of matter*”

2024 Attended the Joint Mathematics Meetings in San Francisco, with special focus on the special session “*Modular Tensor Categories and TQFTs beyond the finite and semisimple*”

2023 Attended the IPAM workshop on “*Topology, Quantum Error Correction, and Quantum Gravity*”

2023 Speaker at the UC Santa Barbara “RACA-CON” conference, on “*Topological quantum computation*”

2023 Finalist in “Undergraduate Research and Creative Activities” slam, for research talk on “*p-adic Pontryagin duality*”

2022 Attended “*Quantum Computing Triple Play*” mini conference at UC Berkeley

2022 Two-time guest lecturer at the Berkeley Math Circle, on “*Galois Theory with applications to Pisot numbers*” and “*Finite Fields with applications to cryptography*”