

Yu (Leon) Liu

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<https://leon2k2k2k.github.io>

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Education

- **Harvard University** August 2021 - Present
Ph.D. in Mathematics
- **The University of Texas at Austin** August 2017 - December 2020
B.S. in Mathematics

Papers and Preprints

- **Abelian duality in topological field theory** December 2021
Accepted to Communications in Mathematics and Physics
- **Constructing the Virasoro groups from differential cohomology** December 2021
Joint with Arun Debray and Christoph Weis
- **Braided monoidal $(\infty, 2)$ category of Soergel bimodules** In preparation
joint with Aaron Mazel-Gee, David Reutter, Catherina Stroppel, and Paul Wedrich.

Services

- **DRP mentorship** Fall 2021
Mentor two undergrads in TQFT
- **Reflection positivity seminar** Spring 2022
Co-organized an online seminar on Freed-Hopkins' reflection positivity and invertible phases paper.
- **DRP mentorship** Fall 2022
Mentor one math undergrad and 3 physics undergrads
- **Topological order seminar** Fall 2022
Organizing a seminar on topological order in 2D and their higher dimensional analogues.

Research talks, Posters

- **Virasoro and Differential Cohomology** March 2022
GSTGC 2022 Georgia Tech
- **Long exact sequence in the symmetry broken phase (Poster)** June 2022
Global Categorical Symmetry Perimeter Institute
- **Stratification in Physical Systems** Nov 2022
UCLA Algebraic Topology seminar UCLA