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
  Accepted to International Mathematics Research Notices. — *joint with A. Debray, C. 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 posivity 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*