

Fei Yu Chen

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RESEARCH:

- In preparation: *Rectification of coconnective coalgebras* with Germán Stefanich
 - Submitted to arxiv: *Costability of comodules* (April 2024)
 - [Simultaneous deformations of objects and \$n\$ -categories](#) (Spring 2023)
 - [On skew polynomial rings over locally nilpotent rings](#) (Summer 2018) with Hannah Hagan and Alisson Wang
 - *On differential polynomial rings in several variables over locally nilpotent rings* (Summer 2018, to appear in International Journal of Algebra and Computation) with Hannah Hagan and Alisson Wang
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CONFERENCES:

- [Panorama of Homotopy theory](#) (attended)
 - [HHHW06](#): Homotopy: fruit of the fertile furrow (attended)
 - [CaCS 2022](#): Categories and Companions Symposium (attended)
 - [MSRI 2020](#): Higher categories and categorification (attended)
 - [Fall 2021-Spring 2022 David Nadler's Geometry Representation Theory seminar](#): Gave talks on homological algebra with Peter Haine.
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GRANTS AND AWARDS:

- Berkeley Connect fellowship (Fall 2022-Spring 2023)
 - Berkeley Departmental summer grant (Summer 2022)
 - RTG Grant: NSF RTG grant DMS-1646385 (Spring 2022)
 - Outstanding Graduate Student Instructor award (2021-2022)
 - Advisor grant (Spring 2021)
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EDUCATION:

September 2019 - Current, University of California, Berkeley

PhD program in Mathematics

- Main organizer for the [Directed Reading Program](#) (Fall 2020-Spring 2023)
- Main organizer for a higher categories seminar with Peter Haine (Fall 2021-Spring 2022)
- Co-organized reading course on Derived algebraic geometry (Fall 2021)
- Passed the qualifying exam (Fall 2020)
- Co-organized student seminar on derived algebraic geometry (Fall 2019)
- Reading course (Fall 2019): read beginning of Lurie's *Higher Topos Theory* with David Nadler
- Reading course (Fall 2019): read the first few chapters of *Algebraic spaces and stacks* with Martin Olsson.

August 2015 - May 2019, University of California, Berkeley

Bachelor's degree in mathematics

WORK EXPERIENCE:**Fall 2023: Graduate Student Instructor for abstract algebra, UC Berkeley**

- Held office hours 10 hours a week for all four separate lectures of abstract algebra

Fall 2022-Spring 2023: Berkeley Connect Mentor

- Taught a discussion-based class focused on building community at Berkeley

Summer 2020: USA/Canada Mathcamp mentor

- Taught and designed several 1 week courses to advanced high school students. The courses included basic category theory, group theory with Rubik's cubes, and homotopy colimit calculations

Fall 2019, Spring 2020, Fall 2020, Fall 2021: Graduate Student Instructor, UC Berkeley

- Led two discussion sections a week for the introductory class on linear algebra and differential equations
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ADDITIONAL SKILLS:

- Chinese and French: Conversational
- Basic programming knowledge in Python, Java, C++, and Haskell
- Pianist (received CM Musicianship)