

Uri Kreitner

Department of Mathematics, ETH Zurich

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CURRENT POSITION AND RESEARCH

PhD student in Mathematics, ETH Zurich | September 2025 - present

Advisor: Yilin Wang.

Complex analysis, conformal probability and Loewner energy; Schramm-Loewner evolution, Brownian loop measures and Weil-Petersson geometry. AI agents for mathematical research.

EDUCATION

MSc in Mathematics, Tel Aviv University

Thesis: *Critical Values of Inner Functions*. Advisor: Oleg Ivrii. GPA: 97.69.

BSc in Mathematics, Tel Aviv University

Summa cum laude. Final grade: 95.00. Dean's Awards, 2019-2021.

PUBLICATIONS AND PREPRINTS

ProofCouncil: An LLM Agent for Solving Open Mathematical Problems.

Johannes Schmitt, Tim Gehrunger, Jasper Dekoninck, Gergely Bérczi, Uri Kreitner, Liam Price and David Holmes. Preprint (2026).

[arXiv:2607.09474](https://arxiv.org/abs/2607.09474) | [Code](#)

Critical values of inner functions.

Oleg Ivrii and Uri Kreitner. *Advances in Mathematics* **452**, 109815 (2024).

[doi:10.1016/j.aim.2024.109815](https://doi.org/10.1016/j.aim.2024.109815) | [arXiv:2212.14818](https://arxiv.org/abs/2212.14818)

WORK IN PREPARATION

Loewner energy of planar graphs.

Invariant Measures via Conformally Balanced Trees. With Oleg Ivrii.

TEACHING AND SUPERVISION

ETH Zurich, spring 2026. Teaching assistant, *Brownian Motion and Stochastic Calculus*; co-supervision of three MSc semester projects on SLE loop measures.

Tel Aviv University, 2022-2024. Teaching assistant.

FURTHER RESEARCH ACTIVITY

FrontierMath Open Problems workshop. Participant, Epoch AI, London, May 2026.

SKILLS AND LANGUAGES

Python; LaTeX; design and evaluation of LLM agents for theorem proving.

English and Hebrew (native).