

Sam Freedman

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Research Interests

Translation surfaces; Teichmüller dynamics; SageMath programming

Employment

University of Chicago, Chicago, IL

Sept 2024–present

L.E. Dickson Instructor, Department of Mathematics

Education

Brown University

Providence, RI

Ph.D. in Mathematics, May 2024 Advisor: Jeremy Kahn

Sc.M. in Mathematics, May 2020

University of Michigan

Ann Arbor, MI

B.S. in Mathematics, High Honors, May 2018 Minor in Computer Science

Publications

1. J. Boulanger and S. Freedman, “There Are No Primitive Teichmüller Curves in $\text{Prym}(2,2)$,” *C. R. Math.* 362 (2024). doi:10.5802/crmath.551
2. S. Freedman, “Periodic Points of Prym Eigenforms,” *J. Mod. Dyn.* 20 (2024). doi:10.3934/jmd.2024004
3. Z. Chowdhury, S. Freedman, *et al.*, “Computing Periodic Points on Veech Surfaces,” *Geom. Dedicata* 217 (2023). doi:10.1007/s10711-023-00804-z
4. J. Hlavinka, S. Kannan, and S. Freedman, “Automorphisms of Tropical Hassett Spaces,” *Port. Math.* 79 (2022). doi:10.4171/pm/2075

Preprints

- S. Freedman and B. Zykoski, “Convex Iso-Delaunay Regions in Strata of Translation Surfaces,” submitted, Sept 2025. arXiv:2509.19550
- T. Lucas and S. Freedman, “Veech Fibrations,” submitted, Oct 2023. arXiv:2310.02325

Selected Talks

- AMS Central Sectional, Saint Louis University, Oct 2025
- Dynamics Seminar, Northwestern University, Feb 2025
- Dynamics Seminar, University of Bristol, Sept 2024
- Geometry/Topology Seminar, CUNY, May 2024

- Geometry/Topology Seminar, Indiana University, Apr 2024
- Group Actions Seminar, UCSD, Mar 2024
- Geometry/Topology Seminar, Yale, Feb 2024

Teaching

University of Chicago

- Honors Calculus I (Math 161), Autumn 2025, Instructor
- Honors Calculus III (Math 163), Spring 2025, Instructor
- Honors Calculus II (Math 162), Winter 2025, Instructor
- Mathematical Methods in the Physical Sciences (Math 184), Winter 2025, Instructor
- Honors Calculus I (Math 161), Autumn 2024, Instructor

Brown University

- Instructor/TA II and TA, 2019–2024: Math 520 (Spring 2024, Spring 2023); Math 200 (Fall 2023, Fall 2022); Math 190 (Fall 2021); Math 100 (Winter 2021, Fall 2019); Math 90 (Winter 2020).

Honors and Grants

- Excellence in Teaching Award, Brown University Math Dept., Aug 2022
- Junior Scientific Visibility Program Grant, FMJH, Mar 2022

Service and Mentoring

- Mentor, Morehouse/Spelman DRP, Fall 2024
- Organizer, Brown Horizons Seminar, 2023–2024
- Organizer & SAO Liaison, Brown Math Circle, 2019–2024
- Directed Reading Program mentor, Brown University, 2020–2022
- BUMP co-organizer and mentor (Group 5), Brown University, Summer 2020

Professional Activities

- Refereeing: *Mathematische Zeitschrift*; *Discrete and Continuous Dynamical Systems*; *IMRN*