David Owen Horace Cutler

Department of Mathematics, Tufts University

david.cutler@tufts.edu

`https://davidohcutler.github.io/`

Research interests

Complex geometry, metric geometry

Education

B.S. in Mathematics, Tufts University, expected May 2026
GPA: 4.0
Coursework: Real Analysis I, Real Analysis II, Harmonic Analysis, Abstract Algebra I, Abstract Algebra II, Topics in Algebra, Analysis[†], Functional Analysis[†], Complex Analysis[†], Algebra II[†], Differential Forms in Algebraic Topology[†], Differential Geometry[†], Alexandrov Geometry[†]
[†]Graduate-level coursework.

Publications

The Hausdorff distance and metrics on toric singularity types (with A. Aitokhuehi, B. Braiman, T. Darvas, R. Deaton, P. Gupta, J. Horsley, V. Pidaparthy, J. Tang), preprint, arxiv:2411.11246

Program participation

UMD REU, convex and complex geometry with Professor Támás Darvas, Jun–Jul. 2024
DIMACS REU, complex geometry with Professor Chi Li, May–Jul. 2025
UCSD research mini-course, complex geometry, Jul. 2025

Teaching experience

Real analysis, teaching assistant, Sep. 2023–Dec. 2024, Sep. 2025–
Differential equations, grader, Jan. 2025–May 2025

Reading groups

Geometric group theory with Professor Nima Hoda, Feb. 2025–present

Talks

Hölder estimates for the Hausdorff distance and a quasi-metric, AMS-MAA-SIAM Special Session on Research in Mathematics by Undergraduates, Joint Mathematics Meetings, Jan. 2025.

Awards and honors

Martin Guterman Award, Apr. 2024
Goldwater Scholarship, Mar. 2025
Sigma Xi, Jun. 2025