SAMUEL TRIPP

Curriculum Vitae

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ACADEMIC APPOINTMENTS

Worcester Polytechnic Institute, Worcester, MA   *August 2022 – Present*
   Assistant Teaching Professor

EDUCATION

Ph.D., Mathematics, *Dartmouth College*, Hanover, NH   *September 2017–2022*
   Advisor: Ina Petkova
   Dissertation: On Grid Homology for Lens Space Links
   A.M. Mathematics   *Spring 2019*

B.A., Mathematics, *Williams College*, Williamstown, MA   *August 2010–May 2014*
   Advisor: Allison Pacelli
   Thesis: Primes in Arithmetic Progressions of Polynomials

TEACHING EXPERIENCE

Worcester Polytechnic Institute, Worcester, MA; *Instructor*
Matrices and Linear Algebra I   *Fall 2022*

Dartmouth College, Hanover, NH; *Instructor*
Probability   *Spring 2022*
Abstract Algebra   *Summer 2020*
Introduction to Calculus   *Fall 2019*

Dartmouth College, Hanover, NH; *Teaching Assistant*
Linear Algebra   *Spring 2019*
Calculus of Vector-valued Functions   *Winter 2019*
Calculus of Vector-valued Functions   *Winter 2018*
Accelerated Multivariable Calculus   *Fall 2017*

Williams College, Williamstown, MA; *Teaching Assistant*
Discrete Mathematics   *Fall 2013*
Discrete Mathematics   *Spring 2012*
Data Structures   *Fall 2011*

EDUCATIONAL OUTREACH

Directed Reading Program, Dartmouth College   *Winter 2021, Winter 2022*
Served as a mentor in program meant to increase mathematical access to stigmatized groups; topics
include *Knot Invariants* and *Low-dimensional Topology*

Sonia Kovalevskaya Day, Dartmouth College   *May 2020, postponed*
Co-organized workshop for middle- and high-school female students with N. Lafrenière, T. Moloney, R.
Orellana, L. Petto

Exploring Mathematics, Dartmouth College   *Summer 2019*
Planned, organized, and conducted two week-long math programs for middle- and high-school students
on *The Mathematics of Games* and *Networks*

Math and Science Resource Center, Williams College   *2012–2013*
Tutored students in multivariable calculus through colleges centralized tutoring space
Mount Greylock Tutor, Williams College   *2010–2012*
Tutored local high school students in chemistry and physics

PROFESSIONAL ACTIVITIES AND SERVICE

Co-organizer, Topology Reading Seminar, Dartmouth College   *2018–2022*
Organizer, Graduate Student Seminar, Dartmouth College   *2018–2022*
Participant, Math Department Racial Justice Reading Group, Dartmouth College *2020-2021*
Department Representative, Graduate Student Council, Dartmouth College   *2018–2021*
Participant, Graduate Student Council Academic Committee, Dartmouth College *2018-2021*
Participant, Teaching Seminar, Dartmouth College Mathematics Department   *Summer 2019*
Intensive summer-long course focused on course and lesson design, assessment design, and presentation
techniques, culminating in the development of *Exploring Mathematics* math programs
Participant, Future Faculty Teaching Series, Dartmouth Center for   *Spring 2019*
    the Advancement of Learning
Series on course design, collaborative learning techniques, and critical moments and diversity
Facilitator, Teaching Assistant Orientation, Dartmouth College   *November 2018*
Led a graduate school-wide orientation for teaching assistants
Participant, Dartmouth Teaching Assistant Discussion Group, Dartmouth College   *Fall 2017*
Member, Sexual Assault Prevention and Awareness Task Force, Williams College *2013–2014*
Representative, Student Math and Statistics Advisory Board, Williams College   *2013–2014*
Member, Honor and Discipline Committee, Williams College   *2012–2014*

HONORS AND AWARDS

Teaching Award Nominee, Guarini School, Dartmouth College   *2022*
Hannah Croasdale Award Nominee, Guarini School, Dartmouth College   *2022*
Ken Bogart Teaching Award Honorable Mention, Dartmouth College Math Department *2020*
Outstanding Graduate Student Teacher, Dartmouth Center for the Advancement *2018*
    of Learning
Departmental Thesis Honors, Williams College   *2014*
Phi Beta Kappa, Williams College   *2013*
Sigma Xi, Williams College   *2013*

PUBLICATIONS AND PREPRINTS

On the invariance of the Dowlin spectral sequence, *with Z. Winkeler*
arXiv version: arXiv:2207.14415.

On grid homology for lens space links: combinatorial invariance and integral coefficients.
arXiv version: arXiv:2110.00663.

L-space knots with tunnel number > 1 by experiment, *with C. Anderson, K. Baker, X. Gao,
M. Kegel, K. Le, K. Miller, S. Onaran, G. Sangston, A. Wood, and A. Wright*
To appear in Experimental Mathematics. arXiv version: arXiv:1909.00790.

Controlling the generic formal fiber of local domains and their polynomial rings, *with P.
Jiang, A. Kirkpatrick, S. Loepp, and S. Mack-Crane*
Journal of Commutative Algebra, Vol.7, No.1, 241-264, 2015. pdf version.

PRESENTATIONS

Joint Math Meetings, Special Session on Knots, Links, 3-Manifolds and 4-Manifolds   *April 2022*
Binghamton University Graduate Combinatorics, Algebra, and Topology Conference   *November 2021*

Dartmouth College Topology Seminar	*October 2021*
Dartmouth Graduate Student Seminar	*Quarterly, 2017–2022*
Joint Math Meetings, AMS Session on Undergraduate Research in Algebra, Combinatorics, and Number Theory	*January 2014*

CONFERENCES AND WORKSHOPS ATTENDED

Joint Math Meetings, Seattle, WA	*January 2022*
Binghamton University Graduate Combinatorics, Algebra, and Topology Conference, Binghamtom, NY	*November 2021*
Foams and Webs, ICERM	*November 2021*
Gauge Theory in Geometry and Topology Summer School, MSRI	*July 2021*
Floer Homology in Low-Dimensional Topology, Stonybrook	*January 2021*
Interactions of Gauge Theory with Contact and Symplectic Topology in Dimensions 3 and 4, BIRS	*June 2020*
Nearly Carbon Neutral Geometric Topology	*June 2020*
Perspectives on Dehn Surgery, ICERM	*July 2019*

PROFESSIONAL MEMBERSHIPS

American Mathematical Society (AMS)	*since Fall 2013*
Mathematical Association of America (MAA)	*since Fall 2013*