

Benjamin Keigwin

CONTACT INFORMATION	Department of Mathematics University of Pennsylvania	keigwin@sas.upenn.edu https://benkeigwin.com
RESEARCH INTERESTS	Algebraic Geometry, Homotopy Theory	
EDUCATION	University of Pennsylvania , Philadelphia, Pennsylvania Graduate Student in Mathematics, August 2020 - May 2025 Expected University of Cambridge , Cambridge, United Kingdom Master of Advanced Study in Mathematics, June 2020 University of Virginia , Charlottesville, Virginia B.A. with Highest Distinction in Mathematics, May 2019	
RESEARCH	<i>Elliptic Curves over Arithmetic Fields</i> (2019). Senior Thesis. <i>Some Explicit Polynomials with Galois Group S_n over \mathbb{Q}</i> (2017).	
PRESENTATIONS AND TALKS	Penn Geometry/Topology Grad Seminar, <i>Functional Analysis and Condensed Mathematics</i> . (Nov 2022) Penn Graduate Algebraic Geometry Seminar, <i>An Introduction to Condensed/Pyknotic Mathematics</i> . (Sept 2022) Penn Geometry/Topology Grad Seminar, <i>Dualities between Algebra and Geometry</i> . (Dec 2021) Public defense of distinguished major thesis, <i>Elliptic Curves over Arithmetic Fields</i> . (April 2019)	
HONORS AND AWARDS	2019	E.J. McShane Prize, University of Virginia Mathematics Department
	2018	E.E. Floyd Prize, University of Virginia Mathematics Department
	2015-2019	Echols Scholar Honors Program, University of Virginia
CONFERENCES & WORKSHOPS ATTENDED	Homotopy Theory with Applications to Arithmetic and Geometry, Fields Institute (June 2022) Chern-Simons and Other Topological Field Theories, MSRI. (Nov 2021) Motivic Homotopy Graduate Summer School at IAS/PCMI. (July 2021) Viva Talbot Conference. (June 2021) Elliptic Curves, Torsors, and L-Functions, University of Virginia. (March 2017)	

Shenandoah Undergraduate Mathematics and Statistics Conference, James Madison University. (September 2016)

TEACHING
EXPERIENCE

Princeton Prison Teaching Initiative

Math instructor at South Woods State Prison
Instructor, Math 015 Beginning Mathematics

Spring 2022

University of Pennsylvania

Teaching Assistant, Math 1610 Honors Calculus

Fall 2022

Teaching Assistant, Math 603 Graduate Algebra

Spring 2022

Teaching Assistant, Math 601 Graduate Algebraic Topology

Spring 2022

Teaching Assistant, Math 241 Calculus IV

Fall 2021

University of Virginia

Teaching Assistant, Math 3340 Complex Variables

Spring 2019

Teaching Assistant, Math 4651 Advanced Linear Algebra

Fall 2018

SERVICE AND
ACTIVITIES

Mentor for Echols Scholar Mentor Program, University of Virginia

2016-2019

Founder of University of Virginia "Integration Bee"

2016