

Dylan Spence

Email: dkspace@indiana.edu

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EDUCATION

Indiana University

Ph.D. in Mathematics

Adviser: Valery Lunts

Bloomington, IN

2016 to Present (Expected 2022)

University of Delaware

Bachelor of Science in Applied Mathematics and Physics

Newark, DE

2011 to 2016

EMPLOYMENT

Indiana University

Associate Instructor/Graduate Student

Bloomington, IN

2016 to Present

RESEARCH INTERESTS

Algebraic geometry. In particular derived categories, deformation theory, moduli, and related equivariant questions. Applications to homological mirror symmetry, birational geometry, geometric representation theory, and motives. I am also interested in noncommutative and higher algebraic structures arising in the above.

PAPERS

Preprint:

1. *Reconstruction of projective curves from the derived category.* arXiv 2002.07961

INVITED TALKS

Particle Physics Seminar, University of Delaware, March 2018

TEACHING EXPERIENCE

Indiana University:

Instructor of Record

Math-J 111: Introduction to College Math I, Fall 2019

Math-M 106: Math of Decision and Beauty, Summer 2019

Math-J 113: Introduction to Calculus with Applications, Spring 2019

Math-J 010: Introduction to Algebra, Summer 2018

Math-M 106: Math of Decision and Beauty, Spring 2018

Math-M 106: Math of Decision and Beauty, Summer 2017

Math-M 014: Basic Algebra, Fall 2016

Grader

Math-M/S 403: Introduction to Modern Algebra I, Fall 2019

Math-M 501: Survey of Algebra, Spring 2018

Math-M 336: Topics in Euclidean Geometry, Spring 2018

Math-M 380: History of Math, Spring 2017

IU Directed Reading Program:

Nathaniel Lowry, *Rational Points on Elliptic Curves*, Spring 2019

Nathaniel Lowry, *Introduction to Algebraic Geometry*, Spring 2018

University of Delaware:

Teaching Assistant

PHYS202: Introductory Physics II, Winter 2016

PHYS202: Introductory Physics II, Winter 2015

HONORS

David A. Rothrock Teaching Award, Indiana University, April 2018

Hazel King Thompson Fellowship, Indiana University Bloomington, Spring 2016

SERVICE

IU Directed Reading Program Coordinator, Fall 2018 - Present

Jumpstart Algebra Qualifier Preparation, Indiana University, Summer 2018

ScienceFest Volunteer, Indiana University, 2016 and 2017

Event Director, Delaware Science Olympiad, 2012, 2013, 2015, 2016