

# JASPER TY

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## EDUCATION

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<b>Drexel University</b> Ph.D in Mathematics Thesis advisor: <a href="#">Jonah Blasiak</a>	<i>Philadelphia, USA</i> 2024-current
<b>Drexel University</b> B.S. in Computer Engineering	<i>Philadelphia, USA</i> 2019-2024

## RESEARCH INTERESTS

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**Algebraic combinatorics** and representation theory.

## PREPRINTS AND PUBLICATIONS

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Still cooking, stay tuned!

## SELECTED TALKS AND PRESENTATIONS

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### Research

<b>Cauchy identities for products under Dyck paths</b> <a href="#">CAGE (Combinatorics, Algebra, and Geometry) seminar</a>	Dec. 4, 2025
<b>The Lascoux kernel and Demazure atom positivity</b> BUGCAT (Binghamton University Graduate Combinatorics, Algebra, and Topology) conference	Nov. 16, 2025
<b>The Lascoux kernel and Demazure atom positivity</b> <a href="#">Drexel Analysis seminar</a>	Oct. 17, 2025

### Exposition

<b>Laplace and <math>z</math>-transforms</b> Drexel SIAM student chapter seminar	Mar. 6, 2026
<b>Minesweeper: Logic, Computation, ...Physics?</b> Penn Pizza seminar	Feb. 2, 2026
<b>Integer compositions</b> Drexel SIAM student chapter seminar	Nov. 13, 2025
<b>Noncommutative Gröbner bases and Bergman's diamond lemma</b> Drexel SIAM student chapter seminar	Apr. 30, 2025
<b>Schubert polynomials</b> Drexel SIAM student chapter seminar	Jan. 27, 2025
<b>Minesweeper: Logic, Computation, ...Physics!?</b> Drexel SIAM student chapter seminar	Oct. 21, 2024

## TEACHING

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Teaching assistant for **MATH-200 (Multivariate Calculus)** at Drexel University.

Spring 2025-2026

Teaching assistant for **MATH-121 (Calculus 1)** at Drexel University.

Fall 2025-2026

## SELECTED COURSES

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<b>MATH-530</b>	Graph Theory
<b>MATH-531</b>	Algebraic Combinatorics
<b>MATH-640</b>	Functional Analysis
<b>MATH-660</b>	Lie Groups and Lie Algebras
<b>MATH-670</b>	Methods of Optimization
<b>MATH-T880</b>	Positive Polynomials and Sums of Squares
<b>MATH-T880</b>	Topics in Operator Theory

## SKILLS

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<b>Software</b>	SageMath, Rust, C, C++, Python, MATLAB, Haskell
<b>Languages</b>	English, French, Waray, Tagalog