GABRIEL DAY

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AREAS OF SPECIALIZATION

Philosophy of Mathematics, Mathematical Logic (Model Theory)

AREAS OF COMPETENCE

Philosophy of Science, Political Philosophy

EDUCATION

University of Notre Dame

Fall 2020—present

Ph.D Candidate, Joint Ph.D in Philosophy and Mathematics (Expected May 2026)

Philosophy advisor: Curtis Franks Mathematics Advisor: Nicholas Ramsey

University of Chicago

Fall 2016—Spring 2020

A.B. in Mathematics, June 2020 A.B. in Philosophy and Allied Fields, June 2020

Philosophy thesis supervised by Kevin Davey

PAPERS UNDER REVIEW AND PREPRINTS

- I. What Model Theory Tells Us About Mathematical Complexity Under Review.
- Results on Colored Tree Properties
 Under Review. (Preprint available at arXiv:2507.06977)

TALKS

- A New Argument against Non-Well-Founded Set Theory
 43rd Annual Graduate Philosophy Conference at the University of Illinois at Urbana-Champaign, April 2022
- 2. A New Argument against Non-Well-Founded Set Theory Midwest PhilMath Workshop, October 2022
- 3. An introduction to GEM models and their application to the \leq_1^* interpretablity order 23rd Graduate Student Conference in Logic, April 2023
- 4. A Result on Generalized Local Character (poster)
 Poster Session at the Model Theory Conference in Seoul, August 2023
- 5. How Classification Reveals Structural Knowledge of Formal Theories

 Conference on Rigor and the Growth of Knowledge at SPHERE, Paris, February 2024
- 6. Understanding model-theoretic classification
 7th International Meeting of the Association for the Philosophy of Mathematical Practice, Pavia, June 2024
- 7. Two Model-theoretic Accounts of Mathematical Complexity
 Rust Belt Workshop in Logic and Philosophy of Mathematics at Ohio State University, February 2025

- 8. What makes a mathematical theory complex? Comparing two model-theoretic accounts
 University of Notre Dame History and Philosophy of Science Colloquium, February 2025
- 9. What is a model-theoretic patterning?
 Paris-Chicago Joint Conference in the Philosophy of Logic and Mathematics, June 2025

TEACHING

At Notre Dame	
Spring 2024	Primary Instructor, Introduction to Marx
Fall 2021	Teaching Assistant, Ancient and Medieval Philosophy
Spring 2022	Teaching Assistant, Introduction to Philosophy
Fall 2022	Teaching Assistant, Introduction to Philosophy
Spring 2024	Teaching Assistant, Formal Logic
Spring 2022	Guest Lecturer, Philosophy of Mathematics (Prof. Joel Hamkins)
Fall 2022	Guest Lecturer, Intermediate Logic (Prof. Joel Hamkins)
Fall 2025	Guest Lecture, Calculus I (Prof. Brian Mulholland)
Fall 2025	Guest Lecturer, Introduction to Philosophy: Philosophy and Mathematics (Prof. Timothy Bays)

AWARDS

2020	Special Honors for a Thesis in Philosophy, University of Chicago Department of Philosophy
2020—present	University of Notre Dame Presidential Fellowship
2024	Graduate School Professional Development Award
2025	Graduate School Professional Development Award

SERVICE

Fall 2025—present, Fall 2021-Spring 20	Mentor for Undergraduate Philosophy Students
2022—present	Co-organizer, Graduate Student Logic and Philosophy of Mathematics Group
2021—present	Philosophy department graduate recruitment committee
Fall 2023—Spring 2025	Co-organizer, Graduate Student Mathematical Logic Seminar