

## Education

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**University of Notre Dame** **Notre Dame, Indiana**  
PhD in Mathematics **August 2015 - May 2020**

- Specialized in model theory. Studied groupoids arising from 2-analysable types, the canonical base property, and the model theory of differentially closed fields.
- Thesis : "Internality in Families"
- Supervisor : Anand Pillay

**Université Pierre et Marie Curie** **Paris, France**  
Agrégation de Mathématiques **September 2014 - June 2015**

- The most advanced french teaching diploma.
- Prepared many lectures at the undergraduate levels for my examination.

**Université Pierre et Marie Curie** **Paris, France**  
Mathematics Undergraduate and Master's degree **September 2009 - June 2014**

## Employment

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**The Ohio State University** **Columbus, Ohio**  
*Visiting Assistant Professor* **August 2023 - Present**

**The Fields Institute and The University of Waterloo** **Toronto and Waterloo, Ontario**  
*Postdoctoral researcher* **August 2021 - August 2023**

- A joint postdoctoral contract funded by the Fields Institute and the University of Waterloo. The first year at the Fields Institute was part of the "Thematic Program on Trends in Pure and Applied Model Theory" and the "Thematic Program on Tame Geometry, Transseries and Applications to Analysis and Geometry".

**Université Claude Bernard Lyon 1** **Lyon, France**  
*GeoMod Postdoctoral researcher* **September 2020 - August 2021**

- A collaborative research project between France and Germany, with many themes in both pure and applied model theory.

**University of Notre Dame** **Notre Dame, Indiana**  
*Graduate Student* **August 2015 - May 2020**

## Publications and Prepublications

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- "Differential-algebraic permutation groups", with James Freitag and Rahim Moosa, arXiv:2307.11220
- "Enriching a predicate and tame expansions of the integers" with Gabriel Conant, Christian D'Elbée, Yatir Halevi and Silvain Rideau-Kikuchi, arXiv:2203.07226
- "Relative Internality and Definable Fibrations", with Anand Pillay and Rémi Jaoui, *Advances in Mathematics*, Volume 415 (2023)
- "CM-trivial structures without the canonical base property", with Thomas Blossier, *Model Theory* Vol. 1 (2022), No. 1, 3154.
- "Groupoids and Relative Internality", *Journal of Symbolic Logic*, 84 (2019), 987-1006

## Teaching experience

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**The Ohio State University** **Columbus, Ohio**  
*Lecturer* **September 2023 - present**

- Fall 2023: Foundations of Higher Mathematics

**University of Waterloo** **Waterloo, Ontario**  
*Lecturer* **September 2022 - August 2023**

- Winter 2023: Calculus 2 for Sciences.
- Fall 2022: Calculus 1 for Engineering.

### **Université Claude Bernard Lyon 1**

*Undergraduate Thesis Supervisor*

**Lyon, France**  
**March 2021 - May 2021**

- Supervised the writing of an undergraduate thesis. The theme was approximation of infinite structures by finite ones: ultraproducts, Fraissé limits and zero-one laws.

### **University of Notre Dame**

*Lecturer*

**Notre Dame, Indiana**

- Fall 2019: Beginning Logic, a symbolic logic course for humanities students. Gave three lectures a week, wrote and graded exams.
- Spring 2019: Calculus 2. Gave three lectures a week.

### **University of Notre Dame**

*Teaching Assistant*

**Notre Dame, Indiana**

- Spring 2020: Calculus 2. Head TA. Tutorials and flipped classroom, both in person and online. Organized TA meetings and writing of tutorial exercises.
- Fall 2016, 2017, 2018: Calculus 3.

## **Administration and Service**

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### **University of Waterloo, CEMC**

*Grader for the Euclid Mathematics contest*

**Waterloo, Ontario**  
**April 2023**

### **University of Waterloo**

*Organizer of the logic seminar*

**Waterloo, Ontario**  
**October 2022 - May 2023**

### **University of Notre Dame, Science Policy Initiative**

*Judge in the Northern Indiana Science Fair*

**Notre Dame, Indiana**  
**February 2020**

### **University of Notre Dame, Graduate Career Center**

*Graduate Assistant*

**Notre Dame, Indiana**  
**October 2019 - April 2020**

- Collected and organized data on Notre Dame's graduate students career paths.

### **Notre Dame Mathematics Graduates Students Association**

*Treasurer*

**Notre Dame, Indiana**  
**August 2018 - May 2019**

- Organized a weekly seminar for graduate students, allowing them to present their work in a laid back setting.

### **American Red Cross**

*Disaster Action Team, Financial and Statistical Information*

**South Bend, Indiana**  
**August 2018 - July 2020**

- Collected and analyzed data on home fires in Indiana. Used this to identify target areas for the Red Cross' recruitment efforts.
- Provided direct assistance to victims of domestic fires.

## **Invited Talks**

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- March 2023: Model Theory Seminar, The University of Notre Dame, Notre Dame, Indiana, United States.
- February 2023: Neostability Workshop, Banff International Research Station, Banff, Alberta, Canada.
- November 2022: Geometry and Model Theory Seminar, The Fields Institute, Toronto, Ontario.
- October 2021: Logic Seminar, University of Illinois at Chicago, Chicago, Illinois.
- July 2021: Workshop on Trends in Pure and Applied Model Theory, The Fields Institute, Toronto, Ontario.
- November 2019: Kolchin Seminar, CUNY Graduate Center, New York City, NY.
- May 2019: Association for Symbolic Logic Annual North American Meeting, Model Theory Special Session. CUNY Graduate Center, New York City, NY.
- October 2018: Neostability Theory Workshop. Casa Matemática Oaxaca, Oaxaca, Mexico.
- November 2017: Logic Seminar, University of Waterloo, Ontario.