

Background

- 2024-2025 **Non-Tenured Teaching and Research Fellow in mathematics**, *Université de Caen Normandie*, (LMNO)
- 2021-2024 **PhD in Mathematics**, *Université de Caen Normandie*, (LMNO)
Advisor: *Eddy Godelle*
Title: *Representations of structure groups of set-theoretical solutions to the Yang-Baxter equation*
- 2021 **Agrégation de Mathématiques, Option C (Algebra and formal calculus)**, (french teaching exam)
- 2018-2020 **Master degree Mathematics and Applications, Pure Mathematics**, *Sorbonne Université*, Paris (with highest honour)
- 2015-2018 **Double-degree Mathematics-Physics**, *Sorbonne Université*, Paris (with high honour)
- 2015 **Baccalauréat - General Scientific, Option: Computer Science**, *Lycée Notre-Dame de Boulogne*, Boulogne-Billancourt

Experiences

- 2020 **Research Internship, Master's Thesis**
Advisors: *Vladimir Dotsenko, Eric Hoffbeck*
Title: *Gröbner basis for algebraic operads*
- 2019 **Research Project, Sorbonne Université**
Advisor: *Benoît Stroh*
Title: *Sheaf theory and Cousin's problems*
- 2018 **Student project, Sorbonne Université**
Advisor: *Arnau Padrol*
Title: *Realization of graph associahedron*
- Summer 2017 **Laboratory internship, Observatoire de Paris (SYRTE)**, (10 weeks)
Advisor: *Stéphane Guérandel*
Title: *Computing the evolution of the density matrix for Cesium*

Organization

- Oct. 2024 **Co-organizer**, *Conference: From Garside to Yang-Baxter (Caen)*, with: *E. Godelle, V. Lebed*
- 2023-2024 **Co-organizer**, *Young researchers Working Group on Elliptic Curves (Caen)*, with: *Francesco Iudica, Alexis Lucas*
- 2022-2024 **Co-organizer**, *Young researchers seminar of the LMNO (Caen)*, With: *Francesco Iudica*

Publications

- 2025 **Hecke algebras for set-theoretical solutions to the Yang-Baxter equation**, Accepted for publication by *Journal of Algebra and its Applications*.
- 2024 **Dehornoy's class and Sylows for set-theoretical solutions of the Yang-Baxter equation**, *International Journal of Algebra and Computation*, Vol. 34, pp. 147-173.

Preprints

- 2025 **How structure groups and monoids grow**, with C. Dietzel & V. Lebed, arXiv:2509.16069.
- 2024 **On Dehornoy's representation for the Yang-Baxter equation**, with C. Dietzel & S. Properzi, arXiv:2409.10648.

Skills

Languages **French** (*native*), **English** (*Fluent*), **German** (*Basics*)

Talks

- 2026 **Équation de Yang–Baxter et théorie des braces**, SPACE Seminar (Dijon, France)
Équation de Yang–Baxter : algèbre et combinatoire, GADT Seminar (Dijon, France)
- 2025 **Equation de Yang–Baxter : combinatoire, algèbre et théorie de Garside.**, ADA Seminar (Calais, France)
Thompson group F and ordered quandles, Workshop on Trickle groups (Tours, France)
Hecke algebras for set-theoretic solutions of the Yang–Baxter equation, The Yang–Baxter Equation and all that (Będlewo, Poland)
The Yang–Baxter Equation: analogies with Coxeter groups, Bielefeld Oberseminar (Bielefeld, Germany)
Algèbre de Hecke pour l'équation de Yang–Baxter, Colloquium of the French Algebra Network (Clermont-Ferrand, France)
- 2024 **Representations of structure group of set-theoretical solutions of the Yang–Baxter equation**, PhD Defense (Caen, France)
Representations of structure group of set-theoretical solutions of the Yang–Baxter equation, Young Researchers' Seminar (Caen, France)
Hecke algebras for the Yang–Baxter Equation, Winter Braids XIII (Montpellier, France)
- 2023 **Germes and Sylows for structure group of solutions to the Yang–Baxter equation**, Young Researchers Algebra Conference 2023 (L'Aquila, Italy)
Germes and Sylows for structure group of solutions to the Yang–Baxter equation, Groups, Rings and the Yang–Baxter equation 2023 (Blankenberge, Belgium)
Germes and Sylows for structure group of solutions to the Yang–Baxter equation, VUB Algebra Research Group Seminar (Brussels, Belgium)
Germes et Sylows pour les groupes de structure des solutions de l'équation de Yang–Baxter, LMNO Algebra and Geometry seminar (Caen, France)
- 2022 **14th days of the Normandie-Mathématiques Federation**, (Diffusion of Mathematics)
An introduction to Coxeter-like groups, Algebra Days in Caen 2022: from Yang–Baxter to Garside (Caen, France)
- 2021 **Groupes de structure des équations de Yang–Baxter**, Young Researchers Seminar (Caen, France)

Formation

- 2021-2025 **Groups and Braids**, Participation in a Working Group (Caen, France)
- Feb. 2024 **Winter Braids XIII** (Montpellier, France), School on braids and low dimensional topology
- 2023 **Teaching Formation**, ED MIIS (Caen, France)
- Feb. 2023 **Winter Braids XII** (Tours, France), School on braids and low dimensional topology
- Sep. 2022 **Braid meeting 2022: Generalized braid groups** (Amiens, France)
- June 2022 **The algebra of the Yang–Baxter equation** (Będlewo, Poland)
- Dec. 2021 **Winter Braids XI** (Dijon, France), School on braids and low dimensional topology
- Apr. 2021 **Scientific Integrity Formation**, ED MIIS (Caen)

Visits

- Apr. 2025 **Barbara Baumeister**, Bielefeld (Germany), 1 week

Teachings

(* : course manager)

2024-2026 **Undergraduate mathematics (Caen):**

- Analysis and numerical applications (**2nd year**) (100h)
- * Geogebra for analysis (**2nd year**) (92h)
- Linear Algebra (**1st year**) (48h)
- Algorithmics (**2nd year**) (40h)
- Linear Algebra (**3rd year**) (35h)
- Arithmetics and Groups (**2nd year**) (30h)
- Refreshing courses (**pre-1st year**) (25h)
- * Computer algebra (15h)

2021-2024 **Teaching Assistant: Networks and Telecommunications (1st year):**

- Programming fundamentals (30h)
- Mathematics of transmissions (40h)
- Mathematics of numerical systems (98h)
- Mathematical analysis of signals (24h)