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Edouard Feingesicht

Background

2024-2025 **Teaching Assistant in mathematics**, *Université de Caen Normandie*, (LMNO)

2021-2024 **PhD in Mathematics**, *Université de Caen Normandie*, (LMNO)
Advisor: *Eddy Godelle*
Title: *Structure groups of 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: *Benoït Stroh*
Title: *Sheaf theory and Cousin problems*

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**, *From Garside to Yang-Baxter (Caen)*, With: *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

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

Pre-publications

2024 **Hecke algebras for set-theoretical solutions to the Yang–Baxter equation**, arXiv:2411.00695.

2024 **Indecomposability and irreducibility of monomial representations for set-theoretical solutions to the Yang-Baxter equation**, with C. Dietzel & S. Properzi, arXiv:2409.10648.

Skills

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

Programming **GAP**, **SageMath**, **LaTeX**, **Python**, **Lua**, **Java**, **C++**

Talks

2021-2024 **Groups and Braids**, Participation in a Working Group (Caen, France)

Jan. 2024 **Hecke algebras for the Yang–Baxter Equation**, Working Group (Caen, France)

July 2023 **Germs and Sylows for structure group of solutions to the Yang-Baxter equation**, Young Researchers Algebra Conference 2023 (L'Aquila, Italy)

Juin 2023 **Germs and Sylows for structure group of solutions to the Yang-Baxter equation**, Groups, Rings and the Yang–Baxter equation 2023 (Blankenberge, Belgium)

Feb. 2023 **Germs and Sylows for structure group of solutions to the Yang–Baxter equation**, VUB Algebra Research Group Seminar (Brussels, Belgium)

Jan 2023 **Germes et Sylows pour les groupes de structure des solutions de l'équation de Yang–Baxter**, LMNO Algebra and Geometry seminar (Caen, France)

June 2022 **14th days of the Normandie-Mathématiques Federation**, (Diffusion of Mathematics)

Mar. 2022 **An introduction to Coxeter-like groups**, Algebra Days in Caen 2022: from Yang–Baxter to Garside (Caen, France)

Dec. 2021 **Groupes de structure des équations de Yang–Baxter**, Young researchers seminar of the LMNO (Caen, France)

Formation

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)

Teachings

2024-2025 **Undergraduate mathematics (Caen)** :

- **Linear Algebra (3rd year)** (35h)
- **Algorithmics (3rd year)** (20h)
- **Analysis and numerical applications (2nd year)** (50h)
- **Geogebra for analysis (2nd year)** (25h)

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)