

# Damien Galant

PhD Student

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👤 [damien-gal](#)

Last updated on January 25, 2023.

## Education

- 2019–2021 **Master's degree in Mathematics**, UMONS, Belgium  
Exchange year at [Orsay's Mathematics Institute](#), France in 2019–2020. Average grade: 19.37/20, Award of the Mathematical Department.
- 2016–2019 **Bachelor's degree in Mathematics**, UMONS, Belgium, *Summa cum laude*  
Academic minor in Computer Science.  
Average grade: 19.27/20, Award of the Mathematical Department.

## Publications

- **On the notion of ground state for nonlinear Schrödinger equations on metric graphs.** Colette De Coster, Simone Dovetta, Damien Galant, Enrico Serra. 2023. ([Preprint available on arXiv](#)).
- **A note on optimal degree-three spanners of the square lattice.** Cédric Pilatte, Damien Galant. 2021. ([Available on the publisher website](#)).
- **Geography of bilinearized Legendrian contact homology.** Frédéric Bourgeois, Damien Galant. 2020. ([Preprint available on arXiv](#)).

## Talks

You can find the corresponding slides and lecture notes on [my website](#).

- 2023 ■ Séminaire d'analyse appliquée A<sup>3</sup>, *On the notion of ground state for the nonlinear Schrödinger equation on metric graphs*, 16 January 2023, LAMFA, UPJV.
- 2022 ■ Séminaire de Mathématiques de Valenciennes, *On the notion of ground state for the nonlinear Schrödinger equation on metric graphs*, 15 December 2022, CERAMATHS/DMATHS, UPHF.  
■ COMPLEX Doctoral School, *Nonlinear Schrödinger equation on metric graphs*, 15 November 2022, UMONS.  
■ 18e Journées Montoises d'Informatique Théorique, *Optimal bounds for geometric dilation and computer-assisted proofs*, 7 September 2022, Czech Technical University in Prague.
- 2021 ■ DEMAV Seminar, *Blow-up phenomena for a Nonlinear Schrödinger Equation*, 25 November 2021, UPHF.  
■ Séminaire d'Algèbre et Logique, *Interactions entre l'apprentissage statistique et la théorie des modèles (part 2, in French)*, 5 February 2021, UMONS.

- 2020 ■ Séminaire d'Algèbre et Logique, *Interactions entre l'apprentissage statistique et la théorie des modèles (part 1, in French)*, 18 December 2020, UMONS.
- 2019 ■ Symplectix Seminar, *Effective computation of the bilinearized Legendrian contact homology*, 8 November 2019, Institut Henri Poincaré.
- "Séminaire sandwiches", *Dilation of regular polygons - Algorithmic aspects (in French)*, 24 October 2019, UMONS.
- Young Mathematicians Symposium of the Greater Region, *The Minimum Dilation Triangulation Problem*, 24 September 2019, ULiège.

## Teaching

- 2022 - **Numerical Analysis Project**, *Teaching assistant*, UMONS
- Present Supervision of a numerical analysis project where students work together in small groups on a problem of applied mathematics, with the help of a computer.
- Sep-Nov **Elementary Mathematics**, *Student teaching assistant*, UMONS
- 2018, 2020 Supervision of in-class and remote exercise sessions, and test grading.
- Aug 2017, **Summer tutoring sessions organized by the Science faculty**, *Student tutor*,
- 2018, 2019, UMONS
- 2021 Gave Math lessons to university students retaking an exam.

## Administrative tasks

Secretary of the Mathematics Department, UMONS, Sep 2021 - Oct 2022

## Languages

French (native), English (professional).

## Programming skills

Languages Rust, OCaml, Python, Java, C/C++,  $\LaTeX$