

Professional experiences

- 2025-2027 **Post-doctorate position**, *Laboratoire Jacques-Louis Lions*, Université Paris Cité
- 2021-2025 **PhD student in mathematics**, *Institut Denis Poisson*, Université de Tours
- 2021-2025 **Teacher in mathematics and computer science**, *Université de Tours*
- 2022-2025 **Teacher in mathematics and computer science**, *SUPINFO*, Tours, freelance
- 2019-2024 **Developer and electronics engineer**, *freelance*

Publications

- B. Andreianov, T. Girard, Existence of solutions for a class of one-dimensional models of pedestrian evacuations, *SIAM J. Math. Anal.* 56 (3) 3386-3411, 2024.
- D. Amadori, B. Andreianov, M. Di Francesco, S. Fagioli, T. Girard, et al., The mathematical theory of Hughes' model: a survey of results. *Crowd Dynamics* (volume 4), 2023.
- P. Cardaliaguet, N. Forcadel, T. Girard, R. Monneau, Correspondance between scalar conservation law and Hamilton-Jacobi-Bellman evolution equation on a simple network in the convex case, *Discrete and Continuous Dynamical Systems*, 44(12):3920–3961, 2024.

Academic cursus

- 2025 **Doctorat en Mathématiques**, *Université de Tours*
- 2021 **Master mathématiques approfondies**, *Université de Tours*
- 2019 **Licence de mathématiques**, *Université de Tours*
- 2015-2016 **CPGE BCPST**, *Lycée Descartes*, Tours

Talks

Presentations in workshops/conferences

- Jan 2024 **Conference on Numerical methods for optimal transport problems, mean field games, and multi-agent dynamics**, *Valparaiso*, Chile
- Jan 2023 **Workshop "First order problems on networks and applications"**, *Roma*, Italy

Seminars

- Sep 2024 **Seminar of numerical analysis**, *Besançon*, France
- Dec 2022 **Seminar of the PDE team**, *Rouen*, France
- Nov 2022 **Seminar of the PDE team**, *Tours*, France
- Nov 2022 **Seminar of the PDE team**, *Bangalore*, India

Poster sessions and introductive presentations

- Nov 2023 **PhD students of the IDP day**, *Orléans*, France
- Jul 2023 **PhD students of the IDP week**, *Nouant-Le-Fuzelier*, France
- Jun 2023 **Workshop Maathraffic, Poster session**, *Tours*, France

Travels

- Feb 2025 **Research with F. Peru and J. Berry in the context of a BOUM project**, 1 week, CIRM Marseille, France
- May 2024 **Research with Fabio Camilli**, 2 weeks, Roma, Italy
- Oct 2023 **Participation to the autumn school Ecology, epidemiology and evolution**, 1 week, CIRM Marseille, France
- Apr 2023 **Research with Regis Monneau**, 3 days, Paris, France
- Nov 2022 **Research with Shyam Goshal**, 3 weeks, Bangalore, India
- Jun 2022 **Participation to the HYP 2022 conference**, 1 week, Malaga, Spain

Organization

- 2025 **Organization of a BOUM project**, *Numerical comparison of some macroscopic models for crowd motion*, With F.Peru and J. Berry
<https://conferences.cirm-math.fr/3512.html>
- 2023 **Organization of the workshop Maathraffic**, Tours
<https://www.idpoisson.fr/workshop-maathraffic/>

Teachings

Mathematics

- 2024 **Mathematical tools for biology students**, *L1 Biologie*, Université de Tours, Tours
- 2024 **Algebra III**, *L2 Mathématiques*, Université de Tours, Tours
- 2024 **Analysis III**, *L2 Mathématiques*, Université de Tours, Tours
- 2021-2025 **Linear algebra**, *First year*, Supinfo, Tours
- 2023 **Mathematical reasoning**, *L1 Mathématiques*, Université de Tours, Tours
- 2022-2023 **Geometry**, *L2 Mathématiques*, Université de Tours, Tours

Computer science

- 2025 **Supply chain and Software engineering**, *Master MECEN*, Université de Tours, Tours
- 2024 **Databases with advanced SQL**, *Second year*, Supinfo, Tours
- 2023-2025 **C programming**, *First year*, Supinfo, Tours
- 2023 **Internet of things and embedded systems**, *Second year*, Supinfo, Tours
- 2021-2023 **Python programming**, *L1 Mathématiques*, Université de Tours, Tours

Computer skills

- Back-end dev and database : javascript (nodejs), PHP, MySQL, SQLite
- Software dev : python, C/C++, java, PureData (digital signal processing language)
- Embedded systems (IoT) : arduino, python, C#, C++, processing 5 (p5)
- Web dev (front-end) : javascript, html, css
- Computer utils : bash, git, latex
- Mathematical programming : python, matlab, mathematica
- Technical drawing and 3D modelling : Openscad, Inkscape