Antoine Gagnebin, Ph.D.

✉ antoine.gagnebin@math.ethz.ch
⌂ ETH Zürich, Department of Mathematics Rämistrasse 101, 8092 Zurich, Switzerland

Education

2020 – · · · · ▍**Ph.D. in Mathematics, ETH Zürich** .
Advisor: *Prof. Mikaela Iacobelli*

2018 – 2020 ▍**M.Sc. in Mathematics, University of Neuchâtel**.
Thesis title: *The Vlasov-Poisson equation*.
Advisor: *Prof. Mikaela Iacobelli*

2015 – 2018 ▍**B.Sc. in Mathematics, University of Neuchâtel**

Employment History

2020 – · · · · ▍**Teaching assistant,** at ETH Zürich.

2018 – 2020 ▍**Teaching assistant,** at University of Neuchâtel.

▍**Supply teacher** at the high school of Neuchâtel.

2018 ▍**Internship** at the national centre for nuclear research in Warsaw, Poland.
Simulation of X-ray spectra emitted in tokamak plasmas.

Teaching

2020 – · · · · ▍**ETH Zürich**
Topics in Non-Collisional Kinetic Theory, Student seminar for M.Sc maths students.
An Introduction to Mean-Field Limits for Vlasov Equations, Student seminar for M.Sc maths students.
Euclidean Harmonic Analysis, Exercise sessions for M.Sc maths students.
Mathematical method in physics, Exercise sessions in 2nd-year B.Sc. maths students.
Analysis III, Exercise sessions in 2nd-year B.Sc. engineering students.

2018 – 2020 ▍**Teaching assistant,** at University of Neuchâtel.
Physics, Exercise sessions in 1st-year B.Sc. maths students.

Talks

May 2024 ▍Swiss Mathematical Society Doctoral Day 2024, University of Basel, Switzerland.
Title: Asymptotic time behaviour of Vlasov-type equations.

April 2024 ▍Minisymposium on PDE and Mathematical Physics, ETH Zürich, Switzerland.
Title: Landau damping for Vlasov-type systems on the torus.

January 2024 ▍Vlasovia 2024, Florence, Italy.
Title: Landau damping in Plasma physics.

Talks (continued)

November 2023   🔖   Oberwolfach Graduate Seminar, Będlewo, Poland.
Title: Landau damping for Vlasov-type systems.

September 2023   🔖   SwissMAP Annual General Meeting, Les Diablerets, Switzerland.
Title: Landau damping for Vlasov-type systems.

Research Publications

Published papers

1   A. Gagnebin, *Backward problem for the 1d ionic vlasov-poisson equation*, 2024. 🔗 DOI: `10.3934/krm.2023024`.

2   A. Gagnebin and M. Iacobelli, *Landau damping on the torus for the Vlasov-Poisson system with massless electrons*, 2023. 🔗 DOI: `10.1016/j.jde.2023.08.020`.