

Hong-Quan Tran

Curriculum vitæ

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Education

- 2020–2024 **Ph.D student under the supervision of Justin Salez**, *Université Paris Dauphine*.
- 2020 **Master 2 in Probabilities and Statistics**, *Université Paris Sud*.
with highest honors
- 2019 **Master 1 of Mathematics**, *Université Paris Dauphine*.
with highest honors
- 2018 **Bachelor of Science in Mathematics**, *Université Paris Dauphine*.
with highest honors
- 2017–2020 **Student, major in Mathematics**, *Ecole normale supérieure*, Paris.
- 2014–2017 **Student, major in Mathematics (Talented program)**, *Hanoi University of Science*, Vietnam.
- 2011–2014 **High School Student, Specialized in Mathematics**, *Thai Binh High School for Gifted Students*, Vietnam.

Awards and distinctions

- 2015 **Vietnam Algebra Olympiads for University Students**.
First Prize
- 2015 **Le Van Thiem Award from Vietnam Mathematical Society**.
- 2014 **International Mathematical Olympiad (IMO)**.
Gold Medal

Research papers

- 2021 **The mean-field Zero-Range process with unbounded monotone rates: mixing time, cutoff, and Poincaré constant**, [arXiv](#), *Annals of Applied Probability*. 33(2023).
- 2022 **Cutoff for the non reversible SSEP with reservoirs**, [arXiv](#), *Electronic Journal of Probability*, to appear.
- 2023 **Cutoff for the Glauber-Exclusion process in the full high-temperature regime: an information percolation approach**, [arXiv](#).

Talks

- November 15th, 2023 **Information percolation and cutoff for the Glauber Exclusion process**, *Abu Dhabi Stochastics seminar*, NYU Abu Dhabi.

- April 11th, 2023 **Mixing time of the Symmetric Simple Exclusion Process with reservoirs**, *Seminar dedicated to PhD students of CEREMADE*, Paris.
- July 15, 2022 **Mixing time of the Glauber-Exclusion process at sufficiently high temperature**, *50th Saint Flour Probability summer school*, Saint Flour.
- March 3rd, 2022 **Mixing times and Zero-Range process**, *CEREMADE Winter school for Young Researchers*, Saint-Pierre-Canivet.

Teaching

- 2023-2024 **TA: Probability 2**, L2, Université Paris Dauphine, Paris.
- 2023-2024 **TA: Probability 1**, L2, Université Paris Dauphine, Paris.
- 2020-2023 **TA: Time series**, M1, Université Paris Dauphine, Paris.
- 2021-2023 **TA: Introduction to Probabilities**, L1, Université Paris Dauphine, Paris.
- 2020-2021 **TA: Lebesgue integration and Probabilities**, L3, Université Paris Dauphine, Paris.

Conferences and Summer Schools

- 2023 **Participant**, *ALEA Days 2023*, Marseille, France.
- 2022 **Participant**, *50th Saint-Flour Probability summer school*, Saint-Flour, France.
- 2022 **Participant**, *Probability and Mathematical Physics*, Helsinki, Finland.
- 2022 **Participant**, *100 Years of the Ising Model*, IHES, Bures-sur-Yvettes, France.
- 2021 **Participant**, *Oberwolfach Seminar: The Cutoff Phenomenon for Finite Markov Chains*, online participant, Oberwolfach.
- 2018 **Participant**, *PCMI Summer School in Harmonic analysis*, Park City, Utah.
- 2016 **Participant**, *CIMPA-ICTP research School in Lattices*, Ho Chi Minh City.

Experience

- 2015 **Coach of regional team for the preparation of the Vietnam National Mathematical Olympiads**, *Thai Binh High School for Gifted Students*.

Languages

Vietnamsese	Mother tongue
French	Fluent
English	Fluent