

Yueh-Sheng Hsu

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Born on 22 July, 1995 in Kaohsiung, Taiwan.
Citizenship: French and Taiwanese.
Last update: February 27, 2025

Empolymment

- From **Postdoctoral fellow**, *Technische Universität Wien*, Vienna
10/2024 Institut für Analysis und Scientific Computing
Address: Wiedner Hauptstraße 8–10, 1040 Wien
Under the supervision of Prof. Máté Gerencsér.
- 10/2020 - **PhD student/Attaché temporaire d'enseignement et de recherche**,
08/2024 *Université Paris Dauphine - PSL*, Paris
Under the supervision of Prof. Cyril Labbé.

Education

- June 2024 **PhD**, *CEREMADE, Université Paris Dauphine - PSL*, Paris
These title: On the Random Schrödinger Operators in the Continuous Setting.
Supervisor: Cyril Labbé.
Referees: Anne de Bouard, Giuseppe Cannizzaro.
Jury: Anne de Bouard, Giuseppe Cannizzaro, Cyril Labbé, Mathieu Lewin, Lorenzo Zambotti
- September 2020 **Master in Probability**, *Sorbonne Université*, Paris, with high honors
Master thesis: On the Continuous Parabolic Anderson Model
supervised by Prof. Cyril Labbé.
- January 2018 **B.Sc (Double degree) Electrical Engineering / Mathematics**, *National Taiwan University*, Taipei

Research Interests

- Stochastic analysis Singular SPDEs, regularity structures
- Mathematical physics Random Schrödinger operators, spectral theory, continuum limit of discrete operators

Publications & Preprints

- [1] Hsu, Y.-S., “Landau Hamiltonian with Gaussian white noise potential and the asymptotic of its smallest eigenvalues”, in preparation.
- [2] Hsu, Y.-S. and Labbé, C., “Construction and spectrum of the Anderson Hamiltonian with white noise potential on \mathbf{R}^2 and \mathbf{R}^3 ”, arXiv preprint arXiv:2401.17900 (2024).

- [3] Hsu, Y.-S. and Labbé, C., “Asymptotic of the Smallest Eigenvalues of the Continuous Anderson Hamiltonian in $d \leq 3$.” *Stoch. PDE: Anal. Comp.*, 2022. DOI: 10.1007/s40072-022-00252-y
- [4] Liu, J.-W., Hsu, Y.-S. and Tseng, S.-H. “Extracting Field Information Embedded within a Coarse Pseudospectral Time-Domain Simulation,” *IEEE Antennas and Wireless Propagation Letters*, 2018.

Talks

- 2024 Oxford-Berlin Young Researchers Meeting, Seminar of Free University of Berlin, Séminaire Landau (Rennes), Les Probabilités de Demain (Institut Henri Poincaré).
- 2023 National Taiwan University Mathematics Colloquium, Seminar of FiME (Laboratoire de Finance des Marchés de l’Énergie), GdT des Thésards du LPSM (Sorbonne), Seminar of 3rd year PhD Students (CEREMADE)
- 2022 Saint-Flour Probability School, Winter School of CEREMADE
- 2021 GdR TRAG Young researchers meeting (Institut Henri Poincaré), Young Mathematicians’ Forum (Besançon), Young Researchers’ Seminar (CEREMADE)

Teaching

- 2020–24 Master 1st year, Tutorials (TD), *Discrete-time processes* (132hrs)
- 2020–21 & 2023–24 Undergrad. 2nd year, Tutorials (TD), *Probability 1* (102hrs)
- 2022–23 Undergrad. 2nd year, Practical work on machine (TP), *Probability 2* (20hrs)

Internships

- 07/2017 – **Summer research fellow**, *Institute of Mathematics, Academia Sinica*, Taipei
08/2017 Stochastic calculus and applications in finance
- 09/2016 - **Research assistant**, *Electrical Engineering Department, National Taiwan University*, Taipei
01/2018 Propagation of Orbital-Angular-Momentum Modes in Millimeter-Wave Band, under the supervision of Prof. Jean-Fu Kiang
- 07/2015– **Test engineer**, *Ambedded Technology*, Taipei
11/2015 System testing on Linux-based distributed file system depolyed on microservers

Languages

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|-----------|---|-----------------------------------|
| English | Fluent both in speaking and writing (C1-C2) | <i>TOEFL 109/120, 2017</i> |
| French | Fluent both in speaking and writing (C1-C2) | |
| German | Solid notions, speaking to be brushed up | <i>Goethe-Zertifikat C1, 2017</i> |
| Mandarin | Native | |
| Taiwanese | Native | |