# Curriculum Vitae

## Toyomu Matsuda

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Nationality: Japan Pronoun: he/him

#### EMPLOYMENT

10.2023 – Postdoc, EPFL

– STOAN group run by Prof. Xue-Mei Li

### **EDUCATION**

09.2023	PhD in Mathematics (Summa cum laude), Freie Universität Berlin
	– Supervised by Prof. Nicolas Perkowski
	– A member of the IRTG 2544 (URL)
	<ul> <li>Research stay at University of Oxford (2022 Sept – 2023 Feb) hosted by Prof. Rama Cont</li> </ul>
03.2020	MSc in Mathematics, Kyushu University
	– Supervised by Prof. Yuzuru Inahama
03.2018	BSc in Mathematics, Kobe University
	– Supervised by Prof. Kajino Naotaka

### RESEARCH INTEREST

- Stochastic analysis and stochastic (partial) differential equations
- Disordered systems
- Gaussian stochastic calculus (e.g., fractional Brownian motion)

### **PREPRINTS**

1. P. Das, R. Łochowski, T. Matsuda, and N. Perkowski. *Level crossings of fractional Brownian motion*. 2023. arXiv: 2308.08274 [math.PR].

- 2. T. Matsuda and A. Mayorcas. Pathwise Uniqueness for Multiplicative Young and Rough Differential Equations Driven by Fractional Brownian Motion. 2023. arXiv: 2312.06473 [math.PR].
- 3. T. Matsuda and W. van Zuijlen. Anderson Hamiltonians with singular potentials. 2023. arXiv: 2211.01199 [math.PR].
- 4. T. Matsuda and N. Perkowski. An extension of the stochastic sewing lemma and applications to fractional stochastic calculus. 2022. arXiv: 2206.01686 [math.PR].

### Published

1. T. Matsuda. "Integrated density of states of the Anderson Hamiltonian with two-dimensional white noise". Stochastic Processes and their Applications 153 (2022), pp. 91–127. URL: https://www.sciencedirect.com/science/article/pii/S0304414922001727.

#### Organization of conferences

• 16th Oxford-Berlin Young Researchers Meeting on Applied Stochastic Analysis, Dec 8-10, 2022.

#### TEACHING

• Probability 2 (discrete-time stochastic processes), tutorials, 2022 summer, FU Berlin.

#### Miscellaneous

- Information on talks is available at https://docs.google.com/spreadsheets/d/1Hq3xC7zkISbYOwTR03Kgfj2qLucA5ffEd2mheP6sg2M/edit#gid=0.
- Referee activities for e.g., Electronic Journal/Communications of Probability, Stochastics and Partial Differential Equations: Analysis and Computations, Bernoulli.