Curriculum Vitae

Toyomu Matsuda

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EMPLOYMENT

10.2023 –   Postdoc, *EPFL*

– STOAN group run by Prof. Xue-Mei Li

EDUCATION

09.2023   PhD in Mathematics, *Freie Universität Berlin*

– Supervised by Prof. Nicolas Perkowski

– A member of the IRTG 2544 (URL)

– Research stay at University of Oxford (2022 Sept – 2023 Feb) hosted by Prof. Rama Cont

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 W. van Zuijlen. *Anderson Hamiltonians with singular potentials.* 2023. arXiv: 2211.01199 [math.PR].

3. 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/1Hq3xC7zkISbYOwTRO3Kgfj2qLucA5ffEd2mheP6sg2M/edit#gid=0.

- Referee activities for e.g., Electronic Journal/Communications of Probability, Stochastics and Partial Differential Equations: Analysis and Computations, Bernoulli.