Johannes Brutsche

Positions

2022-present **PostDoc position**, *Akademischer Rat a.Z.*, Department of Mathematical Stochastics, Albert-Ludwigs-Universität Freiburg
Working group of Prof. Dr. Angelika Rohde

2018-2022 **Scientific Assistant**, *Department of Mathematical Stochastics*, Albert-Ludwigs-Universität Freiburg
Working group of Prof. Dr. Angelika Rohde

Education

2018–2022 **PhD in Mathematics**, *Albert-Ludwigs-Universität Freiburg*
Supervisor: Prof. Dr. Angelika Rohde
Title: Sharp adaptive similarity testing with pathwise stability for ergodic diffusions.
Summa cum laude

2015–2018 **M.Sc. in Mathematics**, *Albert-Ludwigs-Universität Freiburg*
Thesis supervisor: Prof. Dr. Thorsten Schmidt, final grade 1.1

2015–2018 **B.Sc. in Economics**, *Albert-Ludwigs-Universität Freiburg*
Thesis supervisor: Prof. Dr. Bernd Raffelhüschen, final grade 1.1

2012–2015 **B.Sc. in Mathematics**, *Albert-Ludwigs-Universität Freiburg*
Thesis supervisor: Prof. Dr. Annette Huber-Klawitter, final grade 1.3

Publications and Preprints

Brutsche, J. and Rohde, A. (2025), *The level of self-organized criticality in oscillating Brownian motion: n-consistency and stable Poisson-type convergence of the MLE*, Preprint

Emming, C., Geks, A.K., Sajadihezaveh, S., Rieker, T., Brutsche, J., Volk, H.A. and Rieder, J. (2025), *Comparison of Prednisolone and Alternative Glucocorticoid Dosing Protocols for Canine Hypoadrenocorticism: Insights from a Survey-Based Study*, Front. Vet. Sci. , 12:1544750. doi: 10.3389/fvets.2025.1544750

Brutsche, J. and Rohde, A. (2024), *Sharp adaptive and pathwise stable similarity testing for scalar ergodic diffusions*, The Annals of Statistics 52(3), 1127-1151.

Brutsche, J. (2022), *Sharp adaptive similarity testing with pathwise stability for ergodic diffusions*, Dissertation.

Talks

06/2025	**DynStoch Conference**, *Le Mans University*
03/2025	**17th German Probability and Statistics Days**, *Dresden University of Technology*
12/2024	**Meeting in Mathematical Statistics**, *CIRM, Luminy (invited)*
08/2024	**Bernoulli-IMS World Congress**, *University of Bochum*
05/2024	**DynStoch Conference**, *Kiel University*
08/2023	**6th International Conference on Econometrics and Statistics**, *Waseda University Tokyo (invited)*
05/2023	**41st Finnish Summer School on Probability and Statistics**, *Lammi*
03/2023	**DynStoch Conference**, *Imperial College London*
03/2023	**16th German Probability and Statistics Days**, *University Duisburg/Essen*
12/2021	**FDM-Seminar**, *University of Freiburg (invited)*

Teaching Experience

as lecturer

Stochastics II, *Lecture*, summer term 2025, (awarded as best lecture)
Practical exercises for 'Stochastics' (with Python), *winter term 2023/2024*
Nonparametric Statistics, *Lecture*, summer term 2023
Practical exercises for 'Stochastics' (with R), *winter term 2021/2022*

as teaching assistant

Probability theory I, *summer term 2025*
Stochastics I, *winter term 2024/2025*
Proseminar: A journey through mathematics, *winter term 2024/2025*
Seminar: Uniform central limit theorems, *summer term 2024*
Linear algebra II, *summer term 2024*
Linear algebra I, *winter term 2023/2024*
Stochastic partial differential equations, *summer term 2023*
Stochastic analysis, *summer term 2022*
Stochastic processes, *winter term 2021/2022*
Spectral theory of high-dimensional random matrices, *summer term 2021*
Probability Theory, *winter term 2020/2021*
Proseminar: Game theory, *summer term 2020*
Analysis III, *winter term 2019/2020*, (awarded as best teaching assistence)
Proseminar: p-adic analysis, *summer term 2019*
Analysis II, *summer term 2019*
Analysis I, *winter term 2018/2019*
Stochastics for computer scientists, *summer term 2018*

Work Experience

2022	**Consultant for True North Partners**, *consultant for the financial industry*, full-time
2015-2018	**Research Assistant**, *Institute of Mathematics and Physics*, Albert-Ludwigs-Universität Freiburg
2015	**Student Assistant**, *Chair of Business Taxation*, Albert-Ludwigs-Universität Freiburg

2014-2015	**Student Assistant**, *Institute of Mathematics and Physics*, Albert-Ludwigs-Universität Freiburg

Scholarships and Awards

2025	**Prize for best lecture**, *student-awarded*
2020	**Prize for best teaching assistance**, *student-awarded*
2016-2017	**Deutschlandstipendium**
2012	**Prize of the German Physical Society (DPG)**
2012	**Ferry-Porsche-Preis**