

# Johannes Brutsche

#### **Positions**

2022-present PostDoc position, Akademischer Rat a.Z., Department of Mathematical Stochas-

tics, 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. (2024), Sharp adaptive and pathwise stable similarity testing for scalar ergodic diffusions., The Annals of Statistics, To appear.

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

#### **Talks**

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

Inst. f. Mathematik – Ernst-Zermelo-Straße 1, 79104 Freiburg – Germany 

ignipilitätische@stochastik.uni-freiburg.de

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3/2023 16th German Probability and Statistics Days, University Duis
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12/2021 FDM-Seminar, University of Freiburg

## Teaching Experience

#### as lecturer

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

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

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

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