

Doctoral researcher in mathematics at the Institute of Stochastics and Applications, University of Stuttgart. Research in extreme value theory, stochastic processes, time series, asymptotic statistics, and causality. Doctoral dissertation submitted in August 2026.

Academic positions

2023–present **Research Assistant**, Institute of Stochastics and Applications, University of Stuttgart

Education

2023–2026 **PhD candidate in Mathematics**, University of Stuttgart
Advisor: Marco Oesting
Dissertation: *Modeling and Statistical Analysis of Extremes in Stationary Stochastic Processes* (submitted August 2026)

2020–2023 **MSc in Mathematics**, University of Stuttgart
Advisor: Jürgen Dippon
Thesis: *A Novel Weighted Mean Approach to Estimate the Distribution Function of Potential Outcomes in Observational Studies—an Asymptotic Analysis*

2016–2020 **BSc in Mathematics**, University of Stuttgart

2013–2018 **BMus in Church Music**, State University of Music and Performing Arts Stuttgart

Publications and preprints

Ioan Scheffel, Marco Oesting, and Gilles Stupfler (2026). “Central limit theory for Peaks-over-Threshold partial sums of long memory linear time series.” *Stochastic Processes and their Applications* **197**, Article 104929. DOI

Ioan Scheffel, Marco Oesting, and Gilles Stupfler (2026). “Central limit theory for serial tail dependence estimators in heavy-tailed long memory linear time series.” Preprint. [arXiv:2608.10944](#)

Ioan Scheffel (2026). “Maxima of stationary systems of randomly time-changed Lévy particles.” Submitted to *Stochastic Processes and their Applications*. [arXiv:2604.11434](#)

Research profile

Extremes in long-memory time series. Reduction principles and central limit theory for threshold-based statistics under long-range dependence, including the Hill estimator, tail empirical processes, and serial tail-dependence estimators.

Stationary models for extremal processes. Particle-system constructions of stationary max-infinitely divisible processes using random, state-dependent time changes, connecting Markov processes, Poisson particle systems, and extreme value theory.

Teaching experience

2020–present	Teaching Assistant and Tutor , University of Stuttgart Led tutorials, exercise classes, and lecture-style exercise sessions; prepared and graded assignments; held student consultations; contributed to exam preparation.
Courses	Measure and Probability Theory; Mathematical Statistics; Stochastic Processes; Stochastics and Numerical Mathematics for Teacher Education; Analysis I–II; Higher Mathematics for Physicists I–II; Mathematics for Economists I–II.

Presentations

Invited research seminars

Jun 2026	Dependence in Extreme Value Theory: Tail Clustering and Maxima over Time-Changed Hidden Events <i>Research Seminar, KTH Royal Institute of Technology, Stockholm</i>
May 2026	Dependence in Extreme Value Theory: Tail Clustering and Maxima over Time-Changed Hidden Events <i>Research Seminar, Free University of Bozen–Bolzano</i>

Conference talks

Aug 2025	Extending Brown–Resnick Stationarity to the Max-Domain of Attraction <i>8th International Conference on Econometrics and Statistics (EcoSta), online</i>
Jun 2025	Asymptotics of Peaks-over-Threshold Estimators in Long Memory Linear Time Series <i>14th International Conference on Extreme Value Analysis, Chapel Hill, NC, USA</i>
Mar 2025	Asymptotics of Peaks-over-Threshold Estimators in Long Memory Linear Time Series <i>17th German Probability and Statistics Days, Dresden</i>
Dec 2023	16th International Conference of the ERCIM WG on Computational and Methodological Statistics , Berlin

Posters and workshops

Oct 2024	SPP 2265 Workshop: Geometric Extreme Value Theory , Ruhr University Bochum
Jul 2024	Bernoulli–IMS 11th World Congress , Bochum
2024	German–Japanese Fall School: Time Series, Random Fields and Beyond , Ulm

Research links

[Dissertation](#) · [Google Scholar](#) · [arXiv](#) · [GitHub](#)