



Technische Universität Berlin



Research Associate (PostDoc) - salary grade E13 TV-L Berliner Hochschulen

part-time employment may be possible

Faculty II - Mathematics and Natural Sciences, Institute of Mathematics / Stochastics und Mathematical Finance

Reference number: II-377/25 (starting at the earliest possible / limited until 30/06/2028 / closing date for applications 03/10/25)

Your responsibility:

SFB/Transregio 388 investigates the interplay between rough analysis and stochastic dynamics. Central aspects include rough paths and subsequent developments for nonlinear stochastic partial differential equations. The theory of signatures and rough volatility also provides important connections to algebra, statistics, and financial mathematics.

Website: <https://sites.google.com/view/trr388/>

Project B03 of SFB/TRR388 concerns numerical methods for the treatment of stochastic optimal control problems and backward stochastic differential equations based on the path signature of the driving process.

Your profile:

- Successfully completed university degree (Master, Diplom or equivalent) and PhD in Mathematics or nearby field (at the starting date of employment),
- knowledge of stochastic and rough analysis, as e.g., evidenced by relevant PhD thesis and publications.
- Good knowledge of German and/or English required; willingness to acquire the respective missing language skills.
- Desired: Knowledge of rough path signatures, numerical methods for stochastic models or optimal control

Remark:

The project is situated at TU and WIAS Berlin with half the working hours each, a second half position is available at the WIAS. The successful candidate will be employed at both locations.

More information can be obtained from Prof. Dr. Peter Bank (bank@math.tu-berlin.de) und Dr. Christian Bayer (christian.bayer@wias-berlin.de).

How to apply:

Please send your application **with the reference number** and the usual documents **only by email** (single pdf file, max. 5 MB) to Anika Bartens (bartens@math.tu-berlin.de).

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guaranty for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/.

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

The vacancy is also available on the internet at:
<https://www.jobs.tu-berlin.de>

