



Technische Universität Berlin offers an open position:

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

part-time employment may be possible; under the reserve that funds are granted

Faculty II - Institute of Mathematics / Department of Stochastic Analysis

Reference number: II-678/24 (starting at the earliest possible / limited for 3 years / closing date for applications 03/01/25)

Working field:

Research work in the context of the ERC Consolidator Grant "FluCo" (100%). Work in research at the Institute of Mathematics (Stochastic Analysis), co-supervision of Bachelor and Master students/theses within the research project.

In the ERC Consolidator Grant "FluCo" we concentrate on the analysis of fluctuations in the continuum and conservative stochastic partial differential equations. The research comprises several fields, including:

- conservative SPDEs, singular SPDEs
- mathematics of machine learning
- interacting particle systems, nonequilibrium statistical mechanics
- stochastic fluid dynamics
- stochastic dynamics of (conservative) SPDEs.

We aim to investigate questions of the well-posedness, regularity, qualitative behavior of solutions to SPDEs, (non-)equilibrium large deviations and their numerical simulation. In the mathematics of machine learning, we focus on universal limits (e.g. overparameterization), stochastic learning dynamics, and generalization errors.

More information can be obtained from Prof. Dr. Benjamin Gess (benjamin.gess@tu-berlin.de).

Requirements:

- Successfully completed university degree (Master, Diplom or equivalent) in mathematics
- At the time of hire, proof of completion of doctoral degree in mathematics; with a focus on stochastic analysis, PDEs, or mathematics of machine learning must be submitted
- Good knowledge of German and/or English required; willingness to acquire the respective missing language skills

Desirable:

Experience in any one of the above-mentioned areas would be welcome

Please send your application with the reference number and the usual documents (in particular short motivation letter, complete and up-to-date curriculum vitae, names and contact details of at least 2 referees (the letters should be available to us by the deadline of this call), Bachelor's and Master's transcripts, certificates (with grades)) by email (single pdf file, max. 5 MB) to Frau Sachiyo Yamauchi (personal@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 guarantee 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.

Technische Universität Berlin - Die Präsidentin - Fakultät II, Institut für Mathematik, Prof. Dr. Benjamin Gess, Sekr. MA 7-1, Straße des 17. Juni 136, 10623 Berlin

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

