Job Announcement

The University of Potsdam was founded in 1991 and has firmly established itself within the scientific landscape and developed into an outstanding economic factor and growth engine for the region. The university excels in acquiring third-party funds, has received multiple teaching awards, has a very service-oriented administration, and has been honored several times for its family-friendly culture. About 20,000 students and 3,000 employees study and work at three campuses – Am Neuen Palais, Griebnitzsee and Golm – at one of Germany's most scenic institutions of higher education.

The **DFG-funded Collaborative Research Centre CRC 1294 "Data Assimilation – The Seamless Integration of Data and Models"**, hosted at the **University of Potsdam** and jointly operated with its partner institutions **HU Berlin, TU Berlin, GFZ Potsdam, TU Ilmenau, University of Rostock, and HMU Potsdam**, invites applications for two positions mainly based at the University of Potsdam limited until 30 June 2029, to be filled **as soon as possible**:

Academic Staff Member (f/m/d)
Postdoc Position
ID no. 378/2025

The assimilation of time-dependent data into complex evolution models gives rise to some of today's most compelling mathematical and computational challenges. These challenges form the core of CRC 1294. Data assimilation is a rapidly growing field situated at the intersection of mathematics, statistics, machine learning, and a wide range of application areas in the natural and life sciences.

Our aim is to advance the foundations of data assimilation by developing robust and transparent theoretical foundations, establishing principled computational methodologies, and applying these methodologies to emerging domains such as geosciences, neuroscience, pharmacology, and biophysics. Through this integrative approach, we seek to build a deeper theoretical understanding while simultaneously supporting progress in a rapidly evolving research landscape.

The CRC 1294 provides a supportive and stimulating research environment, including a broad and welcoming interdisciplinary community and its own graduate school. Members benefit from excellent research infrastructure, opportunities for conference participation and international exchange, with flexible formats where possible, as well as funding to invite and collaborate with international experts.

The positions. We are seeking applicants for two postdoctoral positions (100%, TV-L E13) within CRC 1294. Applicants may apply for one or both positions, depending on their interests and qualifications.

B04: Point process modelling of seismicity: deaggregation and model reduction (Prof. Dr. Gert Zöller, Prof. Dr. Matthias Holschneider, PD Dr. Sebastian Hainzl, Research Areas: Mathematics, Seismology)

B11: Understanding time-varying Earth System properties using data assimilation (Prof. Dr. Thorsten Wagener and Prof. Dr. Sebastian Reich, Research Areas: Hydrology, Data Assimilation)

General Requirements: We are looking for highly motivated candidates who can work effectively in an interdisciplinary research environment, enjoy collaborative research, and are proficient in written and spoken English. The two available positions are described in detail below.

Description of positions:

B04: Point process modelling of seismicity: deaggregation and model reduction
(Prof. Dr. Gert Zöller, Prof. Dr. Matthias Holschneider)

Responsibilities: The successful candidate will work on applications and extensions of the model GP-ETAS, which has been developed in the first and the second funding period of the CRC. GP-ETAS is a combination of the Epidemic Type Aftershock sequences (ETAS) model and Gauss process modeling within a fully Bayesian framework (for details see: Molkenthin et al. GP-ETAS: semiparametric Bayesian inference for the spatio-temporal epidemic type aftershock sequence model. Stat Comput 32, 29 (2022). https://doi.org/10.1007/s11222-022-10085-3). The aim of this project is to identify the most relevant components of GP-ETAS that drive the forecast power and to design a reduced model for probabilistic earthquake forecasts, which will be then implemented onto the CSEP (Collaboratory for the Study of Earthquake Predictability) platform in order to compete with other models under community standards.

Requirements: The ideal candidate has a Ph.D. in mathematics, mathematical statistics, or geo-physics. They should have excellent knowledge of statistics, probability theory, and numerical methods. In addition, experience with scientific computing, preferably in Python, is required. They will work at the Institute of Mathematics at the University of Potsdam with Prof. Gert Zöller and Prof. Matthias Holschneider and at the GFZ Helmholtz Centre for Geosciences with PD Sebastian Hainzl.

B11: Understanding time-varying Earth System properties using data assimilation
(Prof. Dr. Thorsten Wagener and Prof. Dr. Sebastian Reich)

Responsibilities: This postdoctoral project aims at tailoring data assimilation strategies to estimate and understand time-varying Earth System properties simulated in (large-scale) hydrological models. The goal of the project is ultimately to develop novel diagnostic strategies to guide hydrologic model improvements. The project will be supervised by Prof. Thorsten Wagener (Hydrological Systems) and Prof. Sebastian Reich (Data Assimilation).

Requirements: Applicants should hold a Ph.D. in mathematics, statistics, or hydrological model-ling, with a strong interest in the respective complementary field.

Further academic qualification (post-doctoral thesis (Habilitation)) is possible. At least one third of your working hours will be reserved for your own academic research.

The successful candidates will work 40 hours per week (100 %). The position is classified within remuneration group 13 of the collective wage agreement among the German federal states (“Tarifvertrag für den öffentlichen Dienst der Länder” – TV-L). The fixed term of employment is in accordance with Section 2 subsection 1 of the German Act on Fixed-Term Employment Contracts in Science and Academia (Wissenschaftszeitvertragsgesetz or WissZeitVG).

The University of Potsdam/ The SFB 1294 values the diversity of its community and pursues the goals of equal opportunity regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age, and sexual orientation and identity. Applications from abroad and from persons with a migration background are expressly encouraged. The university strives for a balanced gender ratio in all employment groups; in areas where women are underrepresented, women are given preference in case of equal suitability (Section 7 paragraph 4 of the Brandenburg Higher Education Act). People with disabilities are given preferential consideration in case of equal suitability. In aptitude tests and selection interviews, individual compensation measures for disadvantages are granted, taking the specific disability into consideration. If a person with a disability would like to make use of individual compensation measures, please state this in the application letter.

For further information see www.sfb1294.de or contact the project PIs directly.

Candidate evaluation will begin immediately after the application deadline on **January 15, 2026**, with an anticipated project start on **1 March 2026**. Interviews will take place within three weeks after the application deadline and can also be conducted online via Zoom. Applications to the SFB should be submitted via email to sfb1294@uni-potsdam.de and should include (1) a statement of research interests and motivation, (2) a full CV, (3) the names and email addresses of at least two referees as well as their reference letters, (4) academic transcripts, (5) a link to an electronic copy of your Master's/Diploma thesis, and (6) a list of publications, talks, or presentations (if any are available) in a single PDF file. Please indicate clearly which of the projects/positions you are applying for (e.g., "B07a") and state your motivation accordingly.

Potsdam, December 4, 2025