

Freie Universität Berlin - Fachbereich Geowissenschaften - Institut für Meteorologie Weather and Climate Processes, SFB 1759



The SFB 1759 "Habitability as a fundamental planetary process: Towards a paradigm shift away from our perception of the uniqueness of Earth" is a newly established Collaborative Research Center studying habitability for life as we know it based on fundamental physio-geo-chemical processes set by the planet's evolution. The study of planetary habitability in this SFB is therefore oriented along the planetary boundary conditions set by astronomy, physics, chemistry and geology, rather than Earth-specific biological evolution. By focusing on the environments in which life may (or may not) evolve, the SFB will be able to define which signatures (such as trace elements in an atmosphere) can be explained by abiotic processes, and which would indeed need some form of extraterrestrial life, leading to a new database of potential biosignatures as well as traces of habitability. As finding potential biosignatures or traces of habitability may also impact society, the SFB takes a holistic approach and investigates also ethical considerations, how scientists communicate scientific results to the public and how these are discussed in social media, as well as the general perception of the public and factors influencing this. In the SFB, different views on one of the most important questions of humanity — are we alone in the universe? — will therefore be examined hand in hand with different perspectives in natural sciences, social sciences, and humanities. More information: <https://www.geo.fu-berlin.de/en/geol/fachrichtungen/planet/projects/SFB1759> The planned position is offered at the Freie Universität Berlin, Institute of Geological Sciences, in Berlin, Germany. Review of applications will start on the day after the application deadline until the position is filled. The earliest starting date of the position is the 1 October 2026. The starting dates are flexible but funding is limited to 30 June 2030. Applications should be written in English and include a cover letter, the names and email addresses two referees, CV, copies of degree certificates and transcripts, all combined into a single pdf (max. 10 MB). It is possible to apply for multiple positions offered within the SFB at the same time, please indicate the reference code(s) for the position(s) that you are applying for and email your application to coord@sfb1759-planetary-habitability.de.

Research assistant (praedoc) (f/m/d)

75% part-time job limited till 30.06.2030 salary grade (Entgeltgruppe) 13 TV-L FU
reference code: SFB1759-B06-SP

City: Berlin; Starting date (earliest): At the earliest possible; Duration: befristet bis 30.06.2030; Remuneration: Entgeltgruppe 13 TV-L FU; Reference number: SFB1759-B06-SP; Closing date: 10/08/26

Tasks

We are seeking applicants at prae-doc level for a position in the newly established collaborative research center SFB 1759. There is an opportunity to pursue a doctoral degree.

The potential impact of atmospheric mineral dust on the climate and habitability of exoplanets, their observable spectral signature, as well as the sensitivity of this impact on various planetary parameters and the coupling of the radiative effects of dust aerosol with the atmospheric circulation and water cycle have not yet been fully explored. To address this research gap, we will use numerical model simulations of planetary

atmospheres, starting with an idealized modelling framework for rocky planets. Subsequently, simulations will be performed for different scenarios, varying, for instance, the planet's obliquity, surface dust sources, topography, and water availability. The PhD researcher shall set up the idealised terra-planet model configuration and perform test simulations, followed by educated scenario simulations. For more information, please contact Stephan Pfahl (stephan.pfahl@met.fu-berlin.de).

Requirements

Requirements:

Completed MSc in Atmospheric Sciences, Geological Sciences, Physics or a related field by the time of employment.

Desirable:

- Experience in atmospheric dynamics and numerical simulations of the atmosphere will be an advantage
- Experience in data analysis and programming, e.g., in Python
- Good analytical and problem-solving skills, good communication skills, and the ability to work independently and as part of a team
- Very good written and spoken English (B2/C1)

Application

Applications should be sent by e-mail, together with significant documents (complete CV incl. all certificates, letter of motivation, references), indicating the **reference code, no later than August 10th, 2026** in PDF format (preferably as *one* document) to Herrn Prof. Dr. Stephan Pfahl: coord@sfb1759-planetary-habitability.de or postal to

Freie Universität Berlin
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Institut für Meteorologie
Weather and Climate Processes, SFB 1759
Herrn Prof. Dr. Stephan Pfahl
Malteserstr. 74-100
Haus D, 12249 Berlin (Lankwitz)

With an electronic application, you acknowledge that FU Berlin saves and processes your data. FU Berlin cannot guarantee the security of your personal data if you send your application over an unencrypted connection.

Freie Universität Berlin is an equal opportunity employer.

More information at <https://stellenticket.de/206048/BUA/>
Offer visible until 10/08/26

