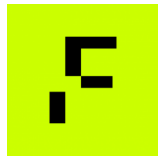


Freie Universität Berlin - Fachbereich Geowissenschaften - Institut für Geologische Wissenschaften Planetary Sciences, SFB 1759



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 of three referees, CV incl. publication list, and copies of degree certificates, 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 (postdoc) (f/m/d)

full-time job limited till 30.06.2030 salary grade (Entgeltgruppe) 13 TV-L FU reference code: SFB1759-B01-JS

City: Berlin; Starting date (earliest): At the earliest possible; Duration: befristet bis 30.06.2030; Remuneration: Entgeltgruppe 13 TV-L FU; Reference number: SFB1759-B01-JS; Closing date: 10/08/26

Tasks

We are seeking applicants at post-doc level for a position in the newly established collaborative research center SFB 1759.

The subproject will study the coupled thermal and orbital evolution of icy moons, focusing in the first project phase on Saturn's active moon Enceladus. The task of the postdoctoral work will be to investigate the orbital evolution, including the interaction with the planet, the Saturnian satellite system, and the rings. For plausible orbital evolution scenarios the coupling of these processes will be explored, which is established by the temperature and

frequency dependent mechanical properties of the interior. The postdoctoral researcher will implement an N-body code for the orbital evolution of a system of icy satellites and will include tidal interactions in that model to study the coupled thermal and orbital evolution. Also numerically less demanding approximations will be used, in terms of orbit averaged evolution equations for the orbital parameters. In later phases, the methods will be applied to other icy moons of the solar system, dwarf planets, KBOs, and exomoons. In this way the project will contribute to the understanding of the formation of habitable niches on bodies with a substantial water fraction. The researcher will conduct parameter studies, analyse the results, present them at conferences, and contribute to publications. For more information, please contact Jürgen Schmidt (juergen.schmidt@fu-berlin.de).

Requirements

Completed PhD in Physics, Planetary Sciences or a related field

Desirable:

- Excellent academic record and doctorate/PhD thesis
- Experience in celestial mechanics and computational physics will be an advantage
- 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, indicating the **reference code, no later than August 10th, 2026** in PDF format (preferably as one document) to Prof. Dr. Jürgen Schmidt: coord@sfb1759-planetary-habitability.de or postal to

Freie Universität Berlin
Fachbereich Geowissenschaften
Institut für Geologische Wissenschaften
Planetary Sciences, SFB 1759
Prof. Dr. Jürgen Schmidt
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/206056/BUA/>
Offer visible until 10/08/26

