

Technische Universität Dresden (TUD), as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

At the **Faculty of Environmental Science, Department of Geosciences, Institute of Planetary Geodesy**, the **Lohrmann Observatory** (<http://astro.geo.tu-dresden.de>), offers, in relation to the ESA mission Gaia, a project position as

Research Associate (m/f/x)

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting at the **earliest possible date**. The position is currently available for a duration of 1 year. Subject to the availability of funds, extensions may be possible up to the end of the project in about 2030. The period of employment is governed by Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG). Balancing family and career is an important issue. The post is generally suitable for candidates seeking part-time employment. Please indicate your request in your application. You also have a possibility to work remotely.

The goal of the space telescope **Gaia** (<https://www.cosmos.esa.int/web/gaia>) is the determination of the spatial positions and velocities as well as the astrophysical characteristics of about 2 billion celestial objects. Gaia is considered as a revolution in astronomy and enjoys the highest international reputation.

The team of the **Lohrmann Observatory** is part of the European Gaia Consortium and primarily responsible for the relativistic aspects of the data processing as well as the definition, computation and analysis of the astrometric solutions of Gaia.

Tasks: Research work in the area of space astrometry with Gaia, especially:

- analysis of the data and scientific results of Gaia;
- design, implementation and application of algorithms and software for the Gaia data processing as well as for the data analysis and reporting.

The focus of the activity will be adjusted according to personal qualifications and can include for example the application of the machine learning techniques for the analysis of residuals and/or the development of the software automating the selection and verification of quasars in the Gaia data.

Requirements:

- university degree in astronomy, physics, mathematics, computer science or related areas;
- reasonable experience in software development; further IT-background is a plus;
- capacity for independent, goal-oriented work, high motivation, readiness to integrate and to take on responsibilities in the team.

- Reasonable knowledge in applied mathematics (for example, statistical data analysis), physics and astronomy is highly desirable.

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

Please submit your comprehensive application including the usual documents until **January 31, 2023** (stamped arrival date of the university central mail service applies), preferably via the SecureMail Portal of the TU Dresden <https://securemail.tu-dresden.de> by sending it as a single pdf document to sergei.klioni@tu-dresden.de or by mail to: **TU Dresden, Fakultät Umweltwissenschaften, Fachrichtung Geowissenschaften, Institut für Planetare Geodäsie, Lohrmann-Observatorium, Herrn Prof. Dr. habil. Sergei A. Klioni, Helmholtzstr. 10, 01069 Dresden, Germany**. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

Reference to data protection: Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: <https://tu-dresden.de/karriere/datenschutzhinweis>.