TUD Dresden University of Technology, 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 limited until December 31, 2025. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). Subject to the availability of resources, extensions in follow-up projects may be possible through approximately 2030. 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;
- in-depth analysis and data mining of large data sets.

The focus of the activity will be adjusted according to personal qualifications of the candidate.

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.
- practical experience with the processing and analysis of large datasets is advantageous.
- 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 detailed application with the usual documents by **November 14, 2023** (stamped arrival date of the university central mail service or the time stamp on the email server of TUD applies) preferably via the TUD SecureMail Portal [https://securemail.tu-dresden.de](https://securemail.tu-dresden.de) by sending it as a single pdf file to sergei.klioner@tu-dresden.de or to: TU Dresden, Fakultät Umweltwissenschaften, Fachrichtung Geowissenschaften, Institut für Planetare Geodäsie, Lohrmann-Observatorium, Herrn Prof. Dr. habil. Sergei A. Klioner, 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](https://tu-dresden.de/karriere/datenschutzhinweis).