The German Center for Astrophysics (DZA) is a new research center in Lusatia, Saxony, that is currently being established. The decision to create the center was made on 29.09.2022 as part of the competition "Science Creating Prospects for the Region!", which was launched by the Federal Government, represented by the Federal Ministry of Education and Research (BMBF), the Free State of Saxony and the Land of Saxony-Anhalt as part of the Act on Structural Change in Coal Mining Areas (Strukturstärkungsgesetz Kohleregionen, StStG) to strengthen Germany's position as a leading location for science and innovation as well as the economic development of the regions affected by the coal phase-out. As a globally visible sign of innovation, the DZA will create new opportunities for strategic leadership roles of German astrophysics and have a lasting impact on structural change in Lusatia.

A three-year start-up phase began in 2023 with the aim of establishing the DZA as an independent institution in 2025. The start-up phase is being jointly organized by TUD Dresden University of Technology and the Deutsches Elektronen Synchrotron (DESY). 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. 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.

During the start-up phase of the DZA, there is a unique opportunity to actively contribute to the establishment of a large research center and to become involved in shaping the future structures.

As part of the development of the DZA, the following project position is to be filled at the earliest possible date in Görlitz:

**Research Associate Vacuum and Cryogenics (m/f/x)**

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

The position is limited until December 31, 2025 with the option for extension / permanence. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz – WissZeitVG).

**Tasks:**
- setting up a modern optics and detector laboratory
- coordination, planning and implementation of pilot projects for the DZA
- collaboration with scientific cooperation partners
- collaboration with industry partners
- project-related supervision of research assistants
- participation in missions to astronomical observatories (including South Africa, Spain, Chile).

**Requirements:**
- university degree (e.g. Master or equivalent) in physics, physical technology, chemistry, process engineering or related subjects
- relevant experience in the areas of vacuum and cryogenic technology, cooled image sensor systems, measurement and control technology
- sound knowledge of practical laboratory work and handling of vacuum systems, experiments at cryogenic temperature, handling of liquid nitrogen
- professional experience in the development of optical instruments is desirable
- relevant experience in the areas of optical design, construction and testing of optical systems, construction and operation of lasers, including safety regulations, implementation and numerical analysis of optical experiments, programming, data processing
- sound knowledge of programming languages, optical design software, CAD software, image processing
- experience in joint work with specialists in mechanical design, detector technology, and overseeing smooth laboratory operations
- resilience, flexibility and adaptability in an evolving organization
- willingness for business trips (including abroad)
- business fluent English.
- Professional experience in the development of cryogenic instruments and experiments is desirable.
- Experience in the field of instrument development for astronomical telescopes is an advantage, but not mandatory.

What we offer you:
- the chance to contribute to the development of the largest research center for astrophysics in Germany
- the opportunity to play an active role in shaping structural change in Upper Lusatia
- the opportunity to establish the personnel requirements to support the discovery of groundbreaking research results and to contribute to the realization of research projects
- a dynamic, committed, international and interdisciplinary environment with renowned experts from science and industry
- conditions and social benefits of the public sector
- compatibility of family and career
- the chance of an permanent employment possible after the start-up phase.

For further information please contact Prof. Dr. Martin Roth (mmroth@aip.de).

TUD and DZA strive 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 quoting the job reference "w23_423" by January 18, 2024 (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 by sending it as a single PDF file to dza@tu-dresden.de or to: TU Dresden, Dezernat Personal, Sachgebiet 2.3, Frau Uta Küßner – persönlich –, 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.