



Leibniz-Institut für Astrophysik Potsdam

The Leibniz Institute for Astrophysics Potsdam (AIP) is a publicly funded German research institute dedicated to astrophysical questions ranging from the study of our sun to the development of the cosmos. Research focuses on cosmic magnetic fields and extragalactic astrophysics and has an international reputation as a competence centre for the development of research technologies in the fields of spectroscopy, robotic telescopes and e-science. The AIP carries out its research mission within the framework of numerous national, European and international co-operations. The institute is the successor to the Berlin Observatory, founded in 1700, and the Astrophysical Observatory Potsdam, founded in 1874, which was the first institute in the world to dedicate itself explicitly to astrophysics. Around 200 employees work at our location in the middle of a beautiful park landscape in Potsdam. As a member of staff of the AIP, you will have the advantage of living very close to the Berlin metropolitan area as well as enjoying the calm, family-friendly area of Potsdam-Babelsberg for your work place and residence.

The Leibniz-Institut für Astrophysik Potsdam (AIP) invites applications for the position of

Mechatronic/Mechanical Engineer (M/F/D)

to join our team in the development of a cutting-edge **fibre positioner technologies** for next-generation astronomical instrumentation. The primary duties are to develop the mechanical, electronic, and verification aspects of a miniaturised robotic positioner. This role is a unique opportunity to work in an **internationally renowned** research environment, contributing to the development of **high-precision systems** that will power the next generation of **spectroscopic survey instruments**.

Key Responsibilities:

- **Design and development** of high-precision mechatronic components for the fibre positioner system.
- Integration of mechanical, electronic, and software systems to ensure optimal performance of the fibre positioner.
- Collaborate with **industry and international partners** consisting of interdisciplinary teams of scientists, engineers, and technicians.
- Participate in prototyping, testing, and optimizing the fibre positioning system to meet the stringent requirements of astrophysical observations.
- Ensure the system's compliance with the rigorous standards necessary for astronomical instrumentation.
- Document development processes and prepare technical reports.

Profile:

The ideal candidate should hold an Engineering degree with a few years of experience, preferably at a professional level, alternatively in a student led project.

- **Bachelor's or Master's degree** in Mechatronics, Mechanical Engineering, Electrical Engineering, System Engineering or a related field.
- Experience in the **design, simulation, and testing** of mechatronic systems, ideally in **precision instrumentation**.
- Excellent knowledge of and proficiency with **CAD software**.
- Knowledge of Python and C programming.
- Knowledge of **electromechanical systems, sensors, actuators, and control systems**.
- Familiarity with **fiber-optic technologies** is a plus.
- **Strong problem-solving skills** and the ability to work independently and within a team.
- Excellent **communication skills** in English; knowledge of German is advantageous but not required.

What We Offer:

- Work in a highly dynamic and **international research environment** at the forefront of astronomical instrumentation.
- Opportunities for **professional development** and growth.
- Access to cutting-edge technology and state-of-the-art facilities.
- A good team spirit in a dynamic research group.
- Competitive salary and benefits package, in accordance with German public service regulations.

Conditions

The position is offered on a fixed-term contract of 3 years. Salary and social benefits are calculated based on the German public service scale TV-L and commensurate with qualifications and experience in relation to the position. Employer contributions to medical, parental leave, and retirement benefits are included.

The AIP is an equal opportunity employer and strives to maintain a diverse, inclusive work environment and culture. AIP particularly encourages applications from women. Preference will also be given to people with disabilities with equal competence.

To apply, please send the following documents (preferably one PDF) to

bewerbung-2024-11@aip.de

1) A cover letter (one page maximum) motivating your application; 2) Curriculum Vitae; 3) Copies of academic degrees; 4) Summary describing your experience, skills, and project-related work so far (≤ 2 pages); 5) Contact information for two individuals willing to provide reference letters upon request. Note that we will request such letters only for a subset of applicants after an initial selection step.

Applications received by 15.12.2024 will receive full consideration. However, later applications may be considered until the position is filled. The appointment could start immediately after the recruitment process is completed. Your application documents will be kept for a period of at least three months after the completion of the filling process. As a rule, your documents will be made available to a selection committee as well as to the committees and functionaries to be involved.

