Leibniz-Institut für AIP Astrophysik Potsdam

The Leibniz Institute for Astrophysics Potsdam (AIP) is dedicated to astrophysical questions ranging from the exploration of our Sun to the evolution of the cosmos, supported by the development of research technology in the fields of spectroscopy. The AIP has many years of experience in the area of optical instrumentation for international telescope facilities, like ESO, LBT, HET or the Calar Alto observatory. Former and current instrumentation projects include 4MOST, MUSE, PMAS, PEPSI and VIRUS; special focus is put on fiber-coupled multi-channel and integral field spectroscopy.

The Leibniz-Institute for Astrophysics Potsdam (AIP) invites applications for a

Scientific Researcher / Optical Engineer in Optical Spectroscopy (m/f/d)

for the development of an optical fiber-system for the Multi-Object Spectrograph of the European Extremely Large Telescope (ELT-MOSAIC)

Overview

For the development of a Multi-Object Spectrograph (MOS) for the European Extremely Large Telescope (ELT), AIP is partnering with European-wide consortia, and is in charge of the optical fiber system from the telescope to the spectrographs. The advertised position is to work with the team to undertake the technical R&D activities of the preliminary design study, to conduct measurements in the optical laboratories and to document the findings and results.

Your tasks

- Develop the preliminary design of the optical fiber systems for ELT-MOSAIC
- Contribute to the optical and mechanical design
- Provide technical feedback on the top-level requirements and the statement of work
- Define the interfaces to the other sub-systems
- Assembly and experimental evaluation of fiber-cable prototypes
- Set-up of optical test benches
- Measurements of optical fibers and micro-optics
- Interaction with industrial partners
- Documentation of designs, experimental setups and measurement results
- Reporting to local and consortium project offices

Essential criteria

- Bachelor (or higher degree) in Physics, (Optical) Engineering or related discipline
- Proficiency and experience in (fiber) optics and working in optical / physics laboratories
- Excellent communication skills in English, written and spoken
- Ability to communicate effectively with peer engineering staff

- Hands-on experience in optics, e.g. optical design, optical test set-ups, measurements
- Good general computer user skills (e.g. standard Office packages, Windows, or Linux,)

Desired experience

- Programming skills (e.g. C++, IDL, MATLAB and/or LabView)
- A background in fiber-optical techniques and / or development of astronomical instrumentation
- Experience in experimental and theoretical fiber-optics and/or micro-optics is a plus
- Communication skills in German are a desirable
- Self-motivation, creativity, flexibility and the ability to work alone and in a team are highly appreciated

Offering & Conditions

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.

The position is offered on a fixed-term contract of 24 months with a possible extension depending on performance and funding. Salary and social benefits are calculated based on the German public service scale. A salary level between E10 and E13 TV-L is envisaged, depending on qualifications and experience in relation to the position. Employer contributions to medical, parental leave, and retirement benefits are included. The position can be either full-time or part-time assignment.

AIP offers an open-minded and cooperative working atmosphere in a modern working environment, very well equipped and located in the middle of a UNESCO World Heritage Site. The institute is located in the beautiful Potsdam-Babelsberg area, southwest of Berlin, and has about 200 employees.

Application

To apply, please register at **https://jobs.aip.de/rec001** and follow the instructions to upload pdf-files of your curriculum vitae, documentation of your qualifications, and either references or contact information for (at least) two referees. Complete applications received by Feb. 10th, 2022 will receive full consideration, but review of applications will continue until the position is filled. For further information or in case of questions, please contact <u>bewerbung-2022-01@aip.de</u>.

Please note that your application documents will be made available to the members of the selection committee and appropriate bodies within AIP. These documents will be kept for at least three months after the completion of the application process.

Contact

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