



# Leibniz-Institut für 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

## **Systems Engineer (m/f/d)**

for the development and support of astronomical instrumentation projects. The successful candidate will work on an advanced optical fiber system for the MOSAIC project at AIP in collaboration with the local project team and external partner network. The MOSAIC project is now entering its Preliminary Design Phase which will conclude with a formal phase-gate review.

### **Your tasks**

- System functional and performance analysis:
  - Perform and document system functional breakdown.
  - Perform and document system performance analyses.
  - Develop models and simulations as needed.
- Requirements development and management:
  - Derive performance requirements from top-level requirements.
  - Develop system operational and maintenance requirements.
  - Manage system requirements.
- Prepare design trade-off analyses.
- Define preliminary verification plan.
- Create and distribute error budgets.
- Interfaces definition and management, Interface Control Documents (ICDs).
- Design documentation.

### **Essential criteria**

- Bachelor (or higher degree) in Engineering
- Proficiency in System Engineering tools and processes
- Excellent communication skills in English, written and spoken
- Ability to communicate effectively with peer engineering staff
- Basic understanding of optical fibre systems

## Desired experience

- Formal degree in Systems Engineering.
- Experience in development, deployment and operation of optical instruments for astronomy.
- Experience with advanced fiber-optic relay systems.
- Experience with engineering in international collaborations.
- Disciplined in quality and product assurance.
- 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/rec002> 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. 10<sup>th</sup>, 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 [bewerbung-2022-02@aip.de](mailto:bewerbung-2022-02@aip.de).

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

Dr Andreas Kelz  
Head of 3D and Multi-Object Spectroscopy  
Leibniz-Institut für Astrophysik Potsdam (AIP)  
An der Sternwarte 16  
D - 14482 Potsdam  
[www.aip.de](http://www.aip.de)