



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

OPTICAL Engineer (m/f)

for the development and support of astronomical instrumentation/telescope projects. The successful candidate will interact closely with AIP project teams and scientists, collaborating institutions and suppliers.

Overview

The institute has a strong record in the development of optical instrumentation for state-of-the-art international telescope facilities, such as the European Southern Observatory in Chile, the Large Binocular Telescope in Arizona, the Hobby Eberly Telescope in Texas, the Calar Alto Telescopes in Spain and also operates the robotic STELLA observatory on Tenerife. AIP will make significant contributions to the next generation European Large Telescope (ELT) instrumentation and is involved in space missions such as Gaia, eRosita and Solar Orbiter. AIP specialises in fibre-coupled precision, multi-channel and integral field spectroscopic systems, and examples of current instrumentation projects include: 4MOST (VISTA), ELT-HiReS, ELT-MOS and GANS (GREGOR).

Initially the successful candidate will primarily work on the 4MOST project at AIP in collaboration with the large local project team and extensive external partner network. Engineering support is required for completion of the final optical design of the AIP sub-system contributions to the 4MOST project and for development of the optical test equipment required for the assembly, integration and testing phases of those sub-systems. In addition optical engineering support is required to complete the optical analysis and verification of 4MOST at the system level.

Your Tasks

- Assist and design optical components, assemblies, sub-system, system solutions based on the system/subsystem functional and performance requirements and constraints, and the critical review of designs developed by other parties using best practice optical engineering principles and design tools.
- Develop, analyse and validate manufacturing, assembly, integration and test (MAIT), quality assurance (QA) and risk mitigation processes, procedures and safe practices for optical sub-systems and systems for complex instrumentation.
- Lead the procurement, fabrication, testing, assembly, integration, and verification of optical systems/subsystems developed by 3rd parties.
- Write mechanical design, analysis, training and maintenance documents for optical components and systems.
- Assist in the specification and development of optical set-ups/systems for technology development and research activities.
- Interact in a multi-disciplinary team involving optical, electronic, and software design and support staff

Your profile must include:

- A degree in optical engineering or equivalent (e.g. Bachelor or Master in Optical Engineering)

- Significant experience in specification, design, optimisation and analysis of optical systems, including familiarity with ISO 10110
- Significant experience procuring, testing and verifying optical components and systems
- Significant expertise in the use of optical modelling and design tools (e.g. e.g. ZEMAX® OpticStudio software)
- Excellent interpersonal and communication skills with the ability to collaborate efficiently and effectively with administrative, technical and scientific staff
- Demonstrated ability to work as a member of multi-disciplinary (often international) teams in close collaboration with optical, electronic, software design and support staff
- Proficiency in documenting designs, analysis, processes and procedures using MS Office software is highly desirable
- Experience in assembling and aligning optical components and systems highly desirable
- Experience in the design and development of optical/near IR astronomical instruments is desirable
- Fluency in spoken and written English and German proficiency is highly desirable
- Experience with optical fibre based systems is a strong asset

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 and those from diverse backgrounds. Preference will also be given to people with disabilities with equal competence. The appointment could be either part or full time and could start immediately after the recruitment process is completed. The appointment would be for 2 years with a possible longer-term perspective, subject to limitations of labour law, performance and funding. 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.

To apply, please send your Curriculum Vitae and copies of academic degrees, certificates, a minimum two letter of reference and any supporting documents (including publication list) to bewerbung_2018-14@aip.de
Complete applications received by 1st July 2018 will receive full consideration.

Contact

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