



The Leibniz-Institut für Astrophysik (AIP) seeks to employ at the earliest possible date a qualified

CONTROLS ENGINEER

to be involved in the development of controls systems of scientific instrumentation projects for application in the field of astronomy.

The Control Systems Engineer will design and implement robotic control systems for selected instrument projects, and will assist in engineering modelling and analysis, and will assist in the search for new projects. The incumbent will join an existing engineering team. Close interaction with other AIP engineering and science teams will be expected. The controls engineer will also interact closely with the local project manager and engineers of other subsystem components at top European astronomy institutes forming part of instrument consortia.

The successful candidate will hold a higher degree or equivalent in an engineering, physics, or related discipline and will be able to demonstrate a high level of technical competence, in particular in mechatronics. They will have experience in the development and commissioning of complex instrumentation; demonstrated teamwork skills; and ability to work and communicate effectively with a broad range of scientific, engineering and technical staff.

The AIP continues the tradition of the Astrophysical Observatory Potsdam and the Berlin Observatory. It is located in the beautiful Potsdam/Babelsberg area, at the southwestern border of the Berlin metropolitan area. About 100 scientists work on a variety of astrophysical topics covering the full range from solar physics to cosmology. AIP has an international reputation for the successful development of astronomical instrumentation for large telescopes.

The position is initially offered on a fixed-term contract of 18 months, with an expected extension to at least 3 yrs. Subject to project funding and employee performance, employment may be renewed for a longer-term appointment. Employment will be based in Potsdam, Germany. The salary is based on the German public service scale (TV-L). The AIP is an equal opportunity employer and as such considers individuals for employment according to their skills, abilities and experiences. Preference will be given to handicapped persons with equal competence.

To apply, please send a Curriculum Vita, job references and copies of diplomas to apply2011_01@aip.de. Review of applications will begin immediately and will continue until the position is filled.

For further information contact:

Leibniz-Institut für Astrophysik Potsdam (AIP)
Dr. R. de Jong, apply2011_01@aip.de
An der Sternwarte 16, D-14482 Potsdam

Your profile:

Essential

- Higher degree in mechatronics, electronics or mechanical engineering; physics; astronomy; or similar technical/scientific field.
- Proven track record, or be able to demonstrate potential for expertise and competence in the conceptual development, design and manufacture of custom robotic control system hardware and software.
- Excellent interpersonal and communication skills with ability to influence and aid technical and scientific staff working as project teams.
- Demonstrated ability to work as a member of a multi-disciplinary team involving close collaboration with optical, electronic, and software design and support staff.

Desirable

It is desired that the successful candidate have or be willing to develop the following–

- Experience in the design of pick-and-place robotic systems.
- Experience with the development of optimal path and collision avoidance algorithms.
- Experience with the principles and application of the System Engineering process in project development.
- Experience in planning and estimating for design and development work.
- Familiarity with production development and with subsystem and final assembly and test processes.
- Able to identify risks and perform appropriate engineering analysis to mitigate engineering risks.
- Experience with optical/infrared instrumentation (imagers, spectrographs).
- Experience with astronomical instrumentation.
- Experience with photonic and fibre-optic systems.
- Knowledge of mechanical, electronic, and software engineering inter-relationships.
- Demonstration of innovative and creative thinking and ability to balance such thinking with conventional wisdom for optimal and cost-effective design development.
- Knowledge of German is an asset.