



# Leibniz-Institut für Astrophysik Potsdam

The Leibniz Institute for Astrophysics Potsdam (AIP) is dedicated to astrophysical questions ranging from the study of our sun to the development of the cosmos. The main research topics are cosmic magnetic fields and extragalactic astrophysics, as well as 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 collaborations. The institute is the successor of the Berlin Observatory, founded in 1700, and the Astrophysical Observatory Potsdam, founded in 1874, which was the first institute in the world explicitly dedicated to astrophysics. Since 1992, the AIP has been a member of the Leibniz Association. Located in the middle of a beautiful park landscape in Potsdam, not far from Berlin, the AIP employs about 200 people.

To strengthen the Technical Section, we are looking for an

electronics engineer with experience in detector technology

at the earliest opportunity.

Your tasks:

You are essentially responsible for the selection, development, modification, integration and qualification of detector systems that are suitable for meeting the scientific requirements of predominantly optical astronomical instruments.

- Integration, qualification and testing of IR/optical detector systems (e.g. deep depletion CCD, L3 CCD, orthogonal transfer CCD, Si-PIN CMOS arrays and HgCdTe);
- Development and programming of electronic assemblies to support scientific instrumentation;
- Collaborate with the local project team and external partner networks from other projects and observatories to define common approaches and standards and share experiences;
- Supporting staff at observatories with maintenance and problem solving for IR/optical detector systems already in operation.

In addition, you will support work of the Technical Software, Electronics, Detectors group in Technical Section with the following practical activities:

- Checking of electronics and control systems;
- Procurement, manufacturing, testing, assembly, integration and commissioning of electronic and control systems;
- Maintenance and repair of historical, unique instruments and research infrastructure;

#### Your profile:

- You have a university degree (MSc) in electrical engineering, physics or an equivalent educational qualification and ideally you have experience in manufacturing scientific equipment / devices.
- You should have significant professional experience in the field of design, integration, qualification and testing of detector systems and should also have experience in several of the following areas:
  - o Concepts of signal and image processing;
  - o General familiarity with low-noise electronics design at cryogenic temperatures; cold optics; mechanical design; cryogenics/vacuum engineering;
  - o Programming languages
    - for low-level programming (assembler, C);
    - for data and image processing (e.g., IDL or Python);
  - o Experience with Linux and real-time operating systems;
- You have extensive knowledge of electronic circuits and of control and regulation and PCB-based circuits and systems, including the use of ECAD/EDA tools and SMD soldering techniques.
- You have experience with the design and manufacture of wiring and housings for electronic assemblies.
- You work in a structured and independent manner. Your way of working is coupled with a strong team spirit, high motivation and self-initiative. You monitor the progress of your own work, meet agreed deadlines and standards and plan activities.
- You can acquire new skills, can adapt to new procedures and recognise opportunities to optimise work processes.
- A strong proficiency in written and spoken English is essential. A good proficiency in German is required.

#### We offer:

- a modern working environment with well-equipped workplaces in the middle of a World Heritage Site,
- an open and cooperative working atmosphere,
- flexible working hours,
- good opportunities for internal and external training,
- an attractive salary, depending on the collective bargaining requirements (professional experience and expertise) up to salary group E 13, as well as the social benefits of the collective bargaining agreement for the public sector of the federal states (TV-L) including the company pension VBL with provision for surviving dependents and in the event of reduced earning capacity, as well as a subsidy for the job ticket

The position is initially limited to a period of two years. Afterwards, we will endeavour to offer a permanent position. The position is suitable for part-time work.

If you have any questions, please send them electronically to:

[bewerbung-2025-04@aip.de](mailto:bewerbung-2025-04@aip.de)

To apply, please send your application documents (letter of application, complete CV, academic degrees and certificates, qualifications and all other documents) via our job portal at <https://jobs.aip.de/rec033> or send your application documents (copies only) by post. Applications will be accepted until the position is filled. E-mail applications will not be accepted.

The selection of applicants begins immediately and continues until the position is filled.

Equal opportunities are an integral part of personnel and organisational development at the AIP, which is why applications from men and women are equally welcome. People with disabilities will be given preferential consideration if they have the same professional aptitude and qualifications.

Your application documents will be kept for at least three months after the end of the recruitment process. As a rule, your documents will be made available to a selection committee and the committees and functionaries to be involved.



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