



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 evolution of the cosmos. Research focuses on 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 in 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. At our location, in the middle of a beautiful park landscape in Potsdam, not far from Berlin, we have about 240 employees.

For strengthening the Solar Physics section, AIP invites applications for a

Postdoctoral Researcher (m/f/d) in Solar Physics

in the framework of a BMBF ErUM project, beginning 2024 July 1.

Position:

The postdoctoral researcher will work in the German Ministry's for Education and Research framework "Research of the Universe and Matter – ErUM" project D-LOFAR-ERIC: New capabilities for the leading low-frequency radio telescope in a new structure. D-LOFAR-ERIC is a joint project of 7 German institutions and aims at contributing to the software development for new functionalities provided by the upgrade of the LOw Frequency ARray (LOFAR) radio telescope to LOFAR2.0. The main objectives are: (i) enabling the full science reach through new and upgraded telescope operation methods, (ii) low-band imaging, (iii) high-resolution imaging using very long baselines and (iv) concurrent low- and high-band solar observing modes with LOFAR 2.0.

The postdoctoral researcher will be responsible for AIP's contribution to the project, with a focus on software development and data analysis for solar observations, in close collaboration with international partners in the Key Science Project "Solar and Heliospheric Physics with LOFAR". Key objectives are simultaneous observations of the solar corona in LOFAR's low- and high-band, the associated calibration challenges, methods for automatic detection of solar radio bursts, and collaboration with ongoing efforts to increase the space weather capabilities of LOFAR, like dual-beam observations in the high-band.

Requirements:

Applicants need to hold a PhD degree in astrophysics, physics, or a related field at the beginning of the appointment. Programming experience, preferably in Python, is necessary. Prior experience in solar physics or heliophysics will be of advantage. Experience with the processing of radio interferometric data would also be beneficial. Good English skills (written and spoken) are essential.

Offering:

The salary is based on professional experience and expertise following the German public service collective agreement (TV-L) with a pay grade of E13. Social benefits included in TV-L are the company

pension VBL and disability and survivors' benefits as well as a subsidy for the job ticket. The appointment will be for 2 years. AIP offers flexible working hours, good opportunities for internal and external training, and an open-minded and cooperative working atmosphere in a modern working environment, very well equipped and located in the middle of a World Heritage Site.

Application:

To apply, please register at the AIP recruitment portal jobs.aip.de/rec017 and follow the instructions to upload the following documents, all in PDF format: A **cover letter** (one page) motivating your application, a **Curriculum Vitae**, your **PhD degree certificate** (if already available, otherwise specify the expected completion date), a **list of publications** and talks, and a **research summary** describing your experience, skills, and project-related work so far (no more than three pages, including any figures). In the cover letter, a link to a PDF of your PhD thesis would be appreciated (if applicable). The cover letter should also provide contact information for up to three individuals willing to provide **reference letters** upon request. Note that we will request such letters only for a subset of applicants after an initial selection step.

Applications received until **2024 March 31** will receive full consideration. Equal opportunities are an integral part of the personnel and organisational development at the AIP, and we therefore strongly encourage female scientists to apply. People with disabilities will be given preferential consideration if they are equally qualified and skilled. Application documents will be kept for at least three months after completion of the appointment process. The documents will be made available to a selection committee and to other committees and officers to be involved.

