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 reinforcement of the Solar Physics section, AIP invites applications for a

**Doctoral Student (m/f/d) in Solar Physics**

beginning 2023 September 1.

**Position**

The doctoral student will work on well-defined research projects to investigate several aspects of solar activity using observational data from ESA’s recent Solar Orbiter mission. AIP is involved in two of the instruments on board, i.e., the X-ray telescope STIX and the particle detector EPD. Therefore, the focus of research will be on studying solar flares and the associated energetic particles, primarily using X-ray data. The student will work in the Solar Physics section at AIP and will also be integrated within the graduate studies programme at the University of Potsdam.

The PhD candidate will be involved in all aspects of the mission-related observational tasks, including data collection and processing, extraction of physical parameters, generation of event lists, coordinated studies with other instruments (both on Solar Orbiter, other space missions, and ground-based observatories), scientific analysis and interpretation, and archiving. It is also foreseen that the student contributes to the automatization of data processing steps using modern techniques such as machine learning.

**Requirements**

Applicants should hold a Master degree or equivalent in physics, astrophysics, or astronomy at the time of starting the position. Prior experience in solar physics or heliophysics will be of advantage. Programming skills in at least one modern programming language (preferably IDL and Python) and experience in working with observational 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 at 66% of a full-time position. 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 position is to be filled for a period of 4 years and 1 month. 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/rec012 and follow the instructions to upload the following documents, all in PDF format: A cover letter (one page) motivating your application, a Curriculum Vitae including a list of publications (if any), your Master degree certificate (if already available, otherwise specify the expected completion date), and a research summary describing your experience, skills, and project-related work so far (no more than two pages, including any figures). In the cover letter, a link to a PDF of your Master thesis would be appreciated (if applicable). Please also provide contact information for up to two 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 2023 July 15 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.

Contact for further information:

Leibniz-Institut für Astrophysik Potsdam (AIP)
Dr. Alexander Warmuth
bewerbung-2023-06@aip.de
An der Sternwarte 16
14482 Potsdam, Germany