

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

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

in the framework of a Horizon Europe project, beginning 2024 June 1.

# Position

The postdoctoral researcher will work in the framework of the Horizon Europe project *Energetic Solar Eruptions: Data and Analysis Tools (SOLER).* SOLER will exploit the data provided by the newly expanded unprecedented heliospheric spacecraft fleet in order to investigate energetic solar eruptions starting from three perspectives: fast coronal mass ejections, strong X-ray flares, and large solar energetic particle events, with the goal of a better understanding of the acceleration and release of high-energy particles. In addition to new scientific knowledge, SOLER will provide the community with advanced data products, and novel data analysis tools.

The postdoctoral researcher will be responsible for the selection, processing, and scientific analysis of X-ray data sets in order to characterize energy release and particle acceleration in major solar flares, as well as for putting the role of flares into the wider context of solar eruptions. The X-ray data will be obtained from multiple spacecraft, with a focus on the STIX instrument on ESA's Solar Orbiter mission. The researcher will also develop, optimize and validate X-ray data analysis methods and tools.

# Requirements

Applicants need to hold a PhD degree in astrophysics, physics, or a closely related field at the beginning of the appointment. Prior experience in solar physics or heliophysics will be of advantage. Programming skills in Python are mandatory, a knowledge of IDL would be a plus, 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. 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 and 6 months. 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/rec016

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 January 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.

# **Contact for further information:**

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