Leibniz Institute for Astrophysics 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 located in the beautiful Potsdam-Babelsberg area, at the southwestern border of the Berlin metropolitan area. The AIP continues the tradition of the Astrophysical Observatory Potsdam and the Berlin Observatory (founded 1700) and has about 200 employees.

For reinforcement of the Solar Physics Section, we are looking to fill two

Post-doctoral Positions (m/f/d)

beginning on 2021 October 1.

Positions

The candidates will work in the field of Solar Physics. Position 1 focusses on Machine Learning techniques to classify photospheric and chromospheric solar spectra and to identify features in high-spatial resolution images while the focus of Position 2 is on spectral inversion techniques. Both positions will contribute to the scientific exploitation of high-resolution data obtained with the 1.5-meter GREGOR solar telescope and the 0.7-meter Vacuum Tower Telescope (VTT) at Observatorio del Teide, Tenerife, Spain. Tasks include analysis of imaging and near-infrared spectropolarimetric data, high-resolution images, and data from solar space missions. Research topics reach from small-scale magnetic fields over sunspots and active regions to filaments/prominences and coronal mass ejections.

Requirements and Selection Criteria

Applicants should hold a Ph.D. degree in astrophysics or a related discipline at the time of starting the position. Applicants are expected to have experience in scientific coding, preferentially with Python and the Interactive Data Language (IDL). The following skills will be advantageous for the position:

- strong background in solar physics, observations, and instrumentation
- experience in solar spectroscopy and polarimetry
- experience with supervised and unsupervised Machine Learning techniques (Position 1) or spectral inversion techniques (Position 2)
- advanced English skills

Offering

A salary depending on the requirements of the German public service collective agreement (professional experience and expertise) with a pay grade of TV-L E13, as well as the social benefits of the collective agreement for the public service (TV-L) including the company pension VBL and disability and survivors' benefits as well as a subsidy for the public transportation ticket. 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.

The position is to be filled for a period of 2 years and is suitable for part-time employment.

Application

If you are interested in one of these positions, please send your application preferably digitally as a single PDF file containing a cover letter (indicating your preference for one of these positions), a curriculum vitae, a copy of your Ph.D. degree certificate (or equivalent) or expected degree completion date, a link to your Ph.D. thesis (or equivalent), your list of publications, and a statement of previous research experience (the latter not exceeding two pages) preferably digitally to

bewerbung_2021-20@aip.de

Applicants should also arrange for two reference letters. Selection of applicants will begin on 2021 October 1 and continues until the position is filled.

Equal opportunity is an integral part of personnel and organizational development at the AIP, and therefore applications from all genders are encouraged. People with disabilities will be given preferential consideration if they are equally qualified and capable.

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

Contact

Leibniz Institute for Astrophysics Potsdam (AIP)
apl. Prof. Dr. Carsten Denker
An der Sternwarte 16
D-14482 Potsdam

Leibniz-Gemeinschaft

TOTAL E-QUALITY