JOB OPENING

The Royal Observatory of Belgium seeks a Post-doctoral Research Assistant (F/M/X) for the ASPIICS coronagraph aboard the PROBA-3 mission

PROBA-3 is an ESA mission in the PROBA line of small technology demonstration satellites. PROBA-3, launched on 5 December 2024, is a mission dedicated to the in-flight demonstration of precise formation flying techniques and technologies. The PROBA-3 mission, currently in the commissioning phase, will place two small satellites in a highly elliptical orbit around the Earth. The two satellites will fly in a precise formation, producing a very long baseline solar coronagraph called ASPIICS (Association of Spacecraft for Polarimetric and Imaging Investigation of the Corona of the Sun). One spacecraft carries the optical telescope, and the second spacecraft carries the external occulter of the coronagraph. The inter-satellite distance of around 144 m will allow observing the inner corona close to the solar limb with very low straylight. This will lead to a significant advance in a number of unsolved problems in solar physics, like the coronal magnetic field configuration, slow solar wind formation, and CME initiation. The duration of the mission is planned to be at least two years.

The Royal Observatory of Belgium (ROB) is the Principal Investigator (PI) institute of the ASPIICS coronagraph. ROB also hosts the Science Operations Centre (SOC) of ASPIICS, which is responsible for daily science operations of ASPIICS and data processing.

ROB is seeking to hire a post-doctoral research assistant to work on the ASPIICS data exploitation.

The selected candidate will work in the ASPIICS team at ROB, which is a small group within the bigger solar physics department (SIDC, Solar Influences Data analysis Centre) of about 50 people. SIDC also hosts the PI teams of the EUI telescope aboard Solar Orbiter and SWAP and LYRA instruments aboard the PROBA2 mission. The selected candidate will interact with the international ASPIICS Science Consortium and with related projects and researchers within ROB/SIDC.

Tasks

The offered position involves contributing to the following tasks:

- conduct independent solar physics research using ASPIICS data,
- publish the results of research in international scientific journals,
- coordination of ASPIICS observations with other space-borne or ground-based solar instruments,
- interaction with the ASPIICS SOC regarding ASPIICS operations and data processing,
- support of the ASPIICS in-flight calibration,
- support of the ASPIICS data workshops.

Profile

For a suitable candidate, the following is required as a minimum:

- to hold a PhD degree in solar physics or in a related field of physics or astrophysics,
- to have experience with observational and/or theoretical solar physics,
- to have programming skills, in particular in IDL/SolarSoft or SunPy,
- to be fluent in written and spoken English.

In addition, the following abilities will give an advantage to candidates during the selection process:

- experience with solar coronagraphs and coronagraph data,
- experience with advanced solar image processing,
- availability to start working early in 2025.

We are looking for candidates who share our enthusiasm/dedication to reach the goal of successful exploitation of the data taken by the ASPIICS coronagraph aboard the PROBA-3 mission.

ROB offer

The ROB (http://www.observatory.be) is a Belgian federal scientific institute located in the green outskirts of Brussels in Uccle. The institute is seeking qualified candidates for a job opening in the "Solar Physics and Space Weather" Operational Directorate (https://www.sidc.be), which is a group of dedicated international scientists and engineers. The working conditions include a flexible system of working hours and teleworking, allowing for a healthy work-life balance.

The job offer is for a **full-time position** in the SW1 category. To get an estimate of the salary, a simulator is available at https://salsim.fedweb.belgium.be/mod2-q1.php. The salaries in Belgian federal scientific institutes are regularly compensated for inflation. The position is starting as soon as possible, with a **one-year contract**, renewable based on mutual satisfaction and funding situation.

How to apply

Send your CV, list of publications, and accompanying motivation letter together with e-mail addresses of two persons who can provide a recommendation to the Principal Investigator of ASPIICS, Dr. Andrei Zhukov, (Andrei.Zhukov@sidc.be), and dir-rob@oma.be. Candidates can contact Andrei.Zhukov@sidc.be for additional information. The application deadline is 31 January 2025.