



Post-Doctoral Fellowship (*SUIT Payload*) at IUCAA, Pune

Brief description of the project: ISRO's Aditya-L1 mission will be a unique space-based Solar Observatory which will observe the Sun from the vantage location of the first Sun-Earth Lagrange point (L1), about 1.5 million kilometers away from Earth. The mission is scheduled to be launched in 2022 and is nominally planned for a five-year lifetime with the possibility of longer operations. The Solar Ultraviolet Imaging Telescope (SUIT) payload on board Aditya-L1 will provide full disk images of the Sun in 11 different passbands between 200-400 nm. It will also be capable of locating and tracking interesting areas of the Sun like active regions, flares, prominences etc. The two main science goals that SUIT will address are the magnetic coupling of the solar atmosphere and variation of spatially resolved solar spectral irradiance in near ultraviolet wavelength range, which is central to Sun-climate relations.

The successful candidate shall primarily work on developing pipeline tools for post processing of the data, and testing the tools using ground calibration data. He or she will also be involved in the design, simulations, assembly, integration and testing of the SUIT payload. The candidate will work with the SUIT team mostly at IUCAA, but should be willing to spend extended time at collaborating facilities of ISRO and other institutes.

IUCAA may provide rent free accommodation based on availability and as per IUCAA norms. The fellowship also provides medical benefits as per IUCAA norms

Qualification & Experience: Candidates who have either submitted their PhD thesis or are already holding a PhD in Physics, Astronomy and Astrophysics, Astronomical Instrumentation or other related areas can apply. Some basic skills in programming with Matlab, Interactive Data Language (IDL) and/or Python will be useful. Familiarity in Solar Physics and Solar data analysis will be preferred. The candidate should be willing to learn the requisite abilities quickly. Candidates with experience in space astronomical instrumentation will be given preference.

Remuneration: Rs 54000 + House Rent Allowance in case an on campus accommodation is not provided. A contingency (research grant) of Rs 40000 per year is also provided for buying books, attending conferences etc...

Period of Contract: Initially for three years (annually reviewed and renewable based on the performance)

Application process: Candidate must submit the following documents for full consideration.

1. A Curriculum Vitae including a list of publications
2. A brief report on the past research activity (Max 1 page)
3. Motivation for this job and future research plans (Max 2 pages)
4. Three confidential letters of reference sent directly by the persons recommending

Deadline: The deadline for the application including the reference letter is April 01, 2022.

All the documents should be sent to the following email address: aocp@iucaa.in

For further information regarding the positions please contact either Prof. A. N. Ramaprakash (anr@iucaa.in) or Prof Durgesh Tripathi (durgesh@iucaa.in).