

Post-Doctoral Fellow under CEFIPRA

General Statement and Description: A post-doctoral position is available starting immediately or soon after to work on a project titled “Investigation of the Origin of Switchbacks in the Solar Corona via Interchange Reconnection – A Statistical and Multi-instruments Approach Including Machine Learning”. This is an Indo-French project funded through the Indo-French Center for the Promotion of Advanced Research. The French collaborator is Dr Clara Froment from the Laboratoire de Physique et de Chimie de l’Environnement et de l’Espace (LPC2E), Orléans, France. The position is to work at the Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune, India, with possible (may be extended) visits to France.

Qualification & Experience: Candidates who have either submitted their PhD thesis or already hold a PhD in Physics, Astronomy and Astrophysics or other related areas can apply. Some basic skills in programming with Python, IDL, C/C++ and numerical simulations are required. Familiarity with Solar Physics and Solar data analysis will be preferred. The candidate should be willing to learn the requisite abilities quickly.

Job Description: Perform studies of observations of solar atmospheric phenomena using statistical and machine learning techniques. The successful candidate will primarily use observations from the Interface Region Imaging Spectrometer (IRIS), Solar Dynamics Observatory (SDO) and Parker Solar Probe. The candidate will also work on performing numerical simulations of solar atmospheric phenomena using the Magnetohydrodynamics (MHD) framework.

Remuneration: For the first year, Rs 47000 + 24% HRA. For the 2nd year, Rs 49000 + 24% HRA, and for the third year, it will enhance to 54000 + 24% HRA. The fellowship also provides medical benefits as per IUCAA norms.

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

Application Procedure: The 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 September 15th, 2023.

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

For further information regarding the positions, please contact Prof Durgesh Tripathi (durgesh@iucaa.in).