Post-Doctoral Fellow (The Solar Ultraviolet Imaging Telescope (SUIT) Payload on board Aditya-L1)

General Statement and Description: The Aditya-L1 mission of the Indian Space Research Organization (ISRO) 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 2020 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 2000-4000 A that will map the solar atmosphere from lower photosphere to upper chromosphere. Using on board intelligence, SUIT will also be capable of locating and tracking exciting areas of the Sun like active regions, flares, prominences, etc. The two primary science goals that SUIT will address are the magnetic coupling of the solar atmosphere and variation of spatially resolved solar spectral irradiance in the near ultraviolet wavelength range, which is central to Sun-climate relations.

Qualification & Experience: Candidates who have either submitted their Ph.D. thesis or are already holding a Ph.D. in Physics, Astronomy and Astrophysics, Solar Physics or other related areas including instrumentation can apply. Basic skills in programming with Matlab, Interactive Data Language (IDL) and/or Python will be useful. The candidate should be willing to learn the requisite abilities quickly.

Job Description: The scope of work involves, but is not limited to, payload design optimization, assembly, integration, and testing, developing the calibration plan, developing tools for post processing of the data, as well as data analysis tools.

As a key member of the SUIT team, the successful candidate may work on one or more of these areas. The candidate will collaborate with the SUIT team mostly at IUCAA. This position also provides an opportunity to work and spend extended time at facilities of ISRO and other participating institutes.

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

Remuneration: Fellowship Rs 40,000/- per month. Contingency Rs 40,000/- per year.

Period of Contract: Initially for three years (annually reviewed and renewable based on performance). There is a possibility that the contract may be extended for a period of additional two years.

Application Procedure: 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 3 pages)
4. Three confidential letters of references sent directly by the persons recommending

All the documents should be sent to the following email address: aocp@iucaa.in on or before October 15th, 2017.

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