

Project Title: 18/14 Characterising the detectors for the Soft X-ray Imager on SMILE

Company: The Open University

Supervisor: Matthew Soman

Location: Milton Keynes

Company Description: The Open University is an internationally recognised research leader in planetary and space sciences and the development of space instrumentation. Covering a wide range of disciplines from astrobiology to electrical engineering, geochemistry to quantum physics; and technologies from electronic imaging to remote sensing, mass spectroscopy to novel sensors; Open University researchers are often found in key roles in international space science missions such as Rosetta, ExoMars, Euclid, JUICE and Athena; with much of the activities performed in collaboration with Space Agencies, Universities and companies around the World. This research also informs our world-leading teaching in the Physical Sciences, Engineering and Earth and Environmental Sciences.

Project Description: Solar Magnetosphere-Ionosphere Link Explorer (SMILE) is a joint mission between ESA and the Chinese Academy of Sciences, with a science goal of studying the dynamic interaction between the solar wind and the Earth's magnetosphere through simultaneous observations in the ultraviolet and soft X-ray regime. This project is an opportunity to join the Open University research team in developing and testing the sensors for the Soft X-ray Imager (SXI) on SMILE.

The team at the Open University's world-leading research centre, the Centre for Electronic Imaging, is responsible for the characterisation and radiation damage studies of the sensors, modelling the instrument background and developing in-flight and ground-based algorithms that help to optimise the mission's scientific return. The internship will include a mixture of programming and hands-on laboratory work in handling the sensors and camera system whilst helping to develop experimental tests to characterising the Engineering Model sensors for this international space-based observatory.

Applicant Specification: This internship would suit a keen and enthusiastic individual with a background in Physics, Engineering, or a related discipline, who is looking to gain experience in the field of space instrumentation.

Preferred Additional Requirements: Experience in Matlab programming and general laboratory equipment (vacuum systems, temperature controllers) would be desirable but similar or relatable experience and a desire to learn are equally valued.

Further details:

8 weeks minimum fixed term contract to be agreed with successful candidate but nominally with a start date around 25 June 2018. Salary is £1,500 per calendar month.



Closing Date for Applications: 04 April 2018

Applications will be through the online form attaching a CV, before the closing date. They will be checked for eligibility and forwarded to the employer.