Candidate Information

Position: Research Fellow in Solar Physics
School/Department: School of Mathematics and Physics
Reference: 24/112333
Closing Date: Monday 20 January 2025
Salary: £39,922 - £46,249 per annum
Anticipated Interview Date: Wednesday 5 February 2025
Duration: 18 months

JOB PURPOSE:

To work on the analysis and interpretation of solar flare datasets within the Astrophysics Research Centre of the School of Mathematics and Physics.

MAJOR DUTIES:

1. Acquire Lyman-alpha datasets taken by space-based telescopes and from instrument archives.
2. Cross-reference datasets from a variety of different instruments.
3. Analyse and interpret relevant datasets, and compare with theoretical models where applicable.
4. Write publications and present the findings at conferences and workshops.
5. Suggest solutions for improving the acquisition of future observations.
6. Assist with the organisation and execution of training workshops.
7. Help supervise (as necessary) and support postgraduate and undergraduate students working in this area.
8. Read academic papers, journals and manuals to keep abreast of developments.
9. Undertake supplementary duties relevant to the success of the project including administrative duties and additional training and development activities as required.

ESSENTIAL CRITERIA:

1. Have or be about to obtain a PhD or equivalent in Solar Physics or a closely-related discipline - either awarded or submitted by the time of taking up the post.
2. Specific relevant research experience to include the following:
   - The analysis and interpretation of solar/stellar observations and or models and simulations.
   - A number of refereed publications and/or technical reports in the research field, commensurate with stage of career.
3. Demonstrable ability to program in IDL and/or Python.
4. Ability to contribute to method improvement where required.
5. Ability to interact effectively with research colleagues and support staff.
6. Demonstrable ability to analyse and communicate effectively.
7. Commitment to continuous professional development.
8. Demonstrable intellectual ability.

DESIRABLE CRITERIA:

1. Experience with the interpretation and analysis of solar/stellar flare observations and/or models and simulations, including spectroscopy.
2. Experience at delivering presentations at conferences and/or workshops.
3. Experience in the analysis of solar datasets taken from multiple vantage points.
4. Ability to program in both IDL and Python.
5. Willingness to travel for periods of time to attend conferences and collaborative visits.