

Candidate Information

Position:	Research Fellow
School/Department:	School of Mathematics and Physics
Reference:	19/107109
Closing Date:	Tuesday 19 February 2019
Salary:	£33,199 to £38,460 per annum
Anticipated Interview Date:	Friday 1 and Monday 4 March 2019
Duration:	until 31 March 2021

JOB PURPOSE:

To undertake research in solar physics within the Astrophysics Research Centre of the School of Mathematics and Physics.

MAJOR DUTIES:

1. Support field trips to observatory sites to acquire imaging and spectropolarimetric observations.
2. Analyse the acquired observational datasets.
3. Carry out spectroscopic and spectropolarimetric inversions.
4. Publish the results in the refereed literature.
5. Present results at relevant national and international conferences.
6. Help supervise (as necessary) and support postgraduate and undergraduate students working in this area.
7. Read academic papers, journals and textbooks to keep abreast of developments.
8. Carry out any other duties designated by a line manager and which fall within the general ambit of the post.

Planning and Organising:

1. Plan own day-to-day activity within the framework of the agreed research programme.
2. Contribute to the planning of research projects through telescope proposals and publications etc.

Resource Management Responsibilities:

1. Ensure research resources are used in an effective and efficient manner.
2. Provide guidance as required to support staff and any students who may be assisting with research.

Internal and External Relationships:

1. Liaise with research colleagues and support staff on routine matters.
2. Make internal and external contacts, to develop knowledge and understanding and form relationships that will ensure the success of the project.
3. Organise, attend and contribute to relevant meetings.

ESSENTIAL CRITERIA:

1. A PhD in Solar Physics, or a closely-related discipline, completed at the time of taking the post.
2. 3 years relevant research experience to include:
 - Experience in the reduction and analysis of observations of the solar atmosphere from ground-based instruments.
 - Experience in the analysis of spectroscopic and spectropolarimetric datasets.
3. A number of high quality refereed publications in the research field, commensurate with stage of career.
4. Familiarity with IDL or other suitable programming environment.
5. Ability to contribute to method improvement where required.
6. Ability to interact with research colleagues and support staff.
7. Ability to analyse and communicate effectively.
8. Demonstrable intellectual ability.

9. Must be prepared to spend considerable time away from home due to working commitments with collaborators.

DESIRABLE CRITERIA:

1. Experience in the acquisition and reduction of imaging, and spectropolarimetric data.
2. Familiarity with programming in Python.
3. Demonstrated observational background.