Candidate Information

Position:	Research Fellow in Modelling of Photoionised Plasmas
School/Department:	School of Mathematics and Physics
Reference:	23/110893
Closing Date:	Monday 15 May 2023
Salary:	£36,333 - £41,931 per annum
Anticipated Interview Date:	Monday 29 May 2023
Duration:	36 months or until 31 July 2026, whichever is sooner

JOB PURPOSE:

To be an active member of the research project/team assisting in the planning and delivery of research activity related to modelling photoionized plasmas relevant to experiments conducted as part of ARC and CLMI joint programmes.

MAJOR DUTIES:

1. Undertake basic research activities area of laboratory astrophysics that will centre on the development and running of simulation codes for photoionized plasmas, critical evaluation and interpretation, computer-based data analysis and evaluation or library research in consultation with the research grant holder or supervisor.
2. Present regular progress reports on research to members of the research group or to external audiences to disseminate and publicise research findings.
3. Write up results of own work and contribute to the production of research reports, publications and proposals.
4. May contribute to introductory courses, for example, on the use of research methods and equipment.
5. Carry out undergraduate supervision/demonstrating/teaching duties under direction.
6. Carry out routine administrative duties as requested, e.g. arranging research group meetings, maintaining research group website.
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.

ESSENTIAL CRITERIA:

1. Degree or equivalent in Physics or physics related subject. Must have PhD in experimental or computational plasma physics or has submitted thesis.
2. At least 3 years experience of using computer codes to model plasmas.
3. Experience of use and development of plasma simulation codes.
4. A publication record in plasma physics commensurate with stage of career.
5. Practical problem solving skills, independence of thought and initiative.
6. Ability to assess and organise resources.
7. Ability to effectively interact with research colleagues and support staff.
8. Ability to analyse and communicate results effectively.
9. Demonstrable intellectual ability and ability to work in small group. Evidence of experimental leadership.
10. Some attendance at international experiments remote from QUB and outside UK for up to several weeks at a time.

DESIRABLE CRITERIA:

1. PhD in writing/development of plasma simulation codes.
2. Experience of experiment simulation at large laser facilities.