

## Candidate Information

<b>Position:</b>	Lecturer (Temporary)
<b>School/Department:</b>	School of Mathematics and Physics
<b>Reference:</b>	19/107419
<b>Closing Date:</b>	Tuesday 21 May 2019
<b>Salary:</b>	£36,261 – £50,132 per annum (potential to progress to £53,175 per annum through sustained exceptional contribution)
<b>Duration:</b>	22 Months

### JOB PURPOSE:

To contribute to the advancement of Laboratory Astrophysics by research, teaching and administration.

### MAJOR DUTIES:

#### Teaching:

1. To participate in all aspects of teaching and examining as designated by, or on behalf of, the Head of School/Director of Education, including such duties as lecturing, setting/marking coursework and examinations, supervising postgraduate students, tutorials, undergraduate project and laboratory supervision, and course evaluation.
2. To develop approaches to teaching and learning that are appropriate to the subject area and that reflect developing practice.
3. To act as internal examiner for undergraduate and postgraduate students.
4. To contribute to the enhancement of quality teaching within the subject, School and Faculty.
5. To develop, and to advise others on, learning and teaching tasks and methods.
6. To keep up-to-date with developments in the subject area.
7. To participate in the development of courses within the School.
8. To seek ways of improving performance e.g. by reflecting on teaching design and delivery, and obtaining and analysing feedback.
9. To be responsible for the record-keeping associated with teaching and the preparation of teaching materials.

#### Research:

1. To undertake research in Laboratory Astrophysics, specifically the use of high-power laser facilities such as VULCAN to generate photoionised plasmas which mimic those found in astrophysical environments.
2. To develop collaborative research programmes both internally and externally.
3. To sustain a high-quality publication record by publishing in leading international refereed journals, and presenting at conferences to advance individual research and to enhance the School's research profile.
4. To act as referee/reviewer and contribute to peer assessment of research.
5. To direct, coach and develop research staff, where appropriate.
6. Where appropriate, to supervise postgraduate students.
7. To ensure that research projects are completed on time and within budget.

#### Administration/Contribution to the Community:

1. To contribute to the School's outreach strategy, for example by giving public and schools lectures, developing public understanding of science projects.
2. To provide pastoral care for students within own area to ensure, as far as practicable, that all relevant issues are dealt with in a timely, sympathetic and effective manner.
3. To carry out designated School functions including, for example, participation in committee work, assisting in the process of admissions, and preparation of submissions for teaching quality assessment or the REF.

#### Planning and Organising:

1. To liaise with others (such as support staff or academic colleagues) to ensure that student needs and expectations are met.

2. To design/update modules in line with the School's teaching strategy.
3. To plan for the use of teaching and research resources.

**Resource Management Responsibilities:**

1. To mentor colleagues with less experience and advise on personal development.
2. To manage own teaching, research and administrative demands under the general supervision of Head of School/Director of Research/Director of Education.
3. To assist in the development of skills and competence in others (for example, through the supervision of research students).

**Internal and External Relationships:**

1. To communicate complex and conceptual ideas to students as well as to peers using high-level skills and a range of media.
2. To hold membership of the School Board, Examination Boards and other committees relevant to the administrative duties.
3. To collaborate with other academics within the School.
4. To participate in and develop networks, for example: contribute to student recruitment, act as website editor, secure student placements, market the institution, facilitate outreach work, build relationships for future activities.
5. To contribute to the School's outreach programme, for example by establishing links with local community groups, industries etc.
6. Where appropriate, to act as external examiner for undergraduate and postgraduate programmes.

**ESSENTIAL CRITERIA:**

1. PhD in experimental laser-produced plasma physics.
2. A record of high quality research publications, commensurate with stage of career.
3. Experience and expertise in the use of major high-powered laser facilities to generate photoionised plasmas.
4. Evidence of ability to teach Physics at all levels through the medium of English.
5. Ability to communicate effectively in English, both verbally and in writing to classes at all levels.
6. Ability to deliver high quality research-level seminars to an expert audience.
7. Logical mind and reasoning ability. Ability to grasp concepts and ideas quickly.
8. Ability to participate and interact in a team for teaching, research and administrative purposes.
9. Enthusiasm for research and teaching and willingness to carry out administrative tasks.
10. Willingness to undertake supervision of postgraduate students.
11. Willingness to undertake field work and overseas travels, including at unsociable times.

**DESIRABLE CRITERIA:**

1. Experience of teaching, tutoring or supervision of undergraduate students in HE.