



## THE POST

**College/Service:** College of Engineering, Mathematics and Physical Sciences

**Post:** Lecturer (Education and Research) in Astrophysics

**Reference No:** P37013

**Grade:** F

**Reporting to:** Pro Vice Chancellor (PVC)

The above full time post is available immediately in the College of Engineering, Mathematics and Physical Sciences.

### Physics at Exeter

The College of Engineering, Mathematics and Physical Sciences wishes to appoint a Lecturer/Senior Lecturer or Associate Professor to expand the current research performed in the Astrophysics group at the University of Exeter (<http://www.astro.ex.ac.uk/>). The group is particularly active in the fields of exoplanets, star formation and computational stellar astrophysics. It engages in cutting-edge instrumentation projects, through the Terra Hunting Experiment (THE, £1M Exeter strategic investment), which will allow the acquisition of unique data enabling the study of Earth-twins, and the MIRC-X project (€1.65M ERC funds) devoted to the inner regions of protoplanetary discs. Exeter is leading a JWST Early Release Science Program devoted to high contrast imaging of exoplanets and is considering establishing an instrumentation lab that will focus on developing high-contrast imaging instrumentation for exoplanet detection and characterization. The group's activities are also at the forefront of complex numerical modelling devoted to star formation, stellar atmospheres/interior structures and to exoplanet atmospheres.

### Job Description

#### **Main duties and accountabilities**

1. To fulfil research, teaching and administration duties as a lecturer in academic area.
2. To extend the research profile of discipline and related areas, especially in the area of Astrophysics, attracting and supervising postdoctorate researchers and postgraduate research students.
3. To collaborate with colleagues both within the College and the University of Exeter as a whole in order to develop and support academic area research programmes and the College's research programme.
4. To contribute to the general operation of the College as a member of its academic team.

#### **Research**

1. To conduct independent research and act as principal investigator and project leader, and in so doing:

Enhance the College's international reputation through research publications of appropriate quantity and quality, and contribute to worldwide debate at national and international conferences, and

Win research earnings through carefully prepared and successful grant applications as well as identifying potential income-generating programmes and collaborative partnerships.

2. To supervise research projects, managing any dedicated research staff and postgraduate research students, and provide the mentorship to enable staff and students to develop their skills and academic careers.
3. To help promote a collegiate working atmosphere and stimulating environment that will attract further research staff of the highest quality as well as good postgraduate research students.
4. To contribute to the further and ongoing development of discipline research at Exeter, especially the area of academic area.

### **Teaching**

To deliver mainly undergraduate courses to appropriate academic standards such that:

1. Knowledge acquired from research translates to teaching
2. Students are challenged but also tutored and supported with individual care
3. Teaching and learning techniques are innovative and inspiring
4. Students are supervised appropriately
5. Assessment criteria are appropriate, and fairly applied with results fed back to students appropriately
6. Module content is continuously reviewed to identify areas for improvement

### **General**

To contribute to the overall general and academic management in the College by undertaking activities that may be required such as:

1. Developing overall academic content and structure of modules with colleagues
2. Developing ideas for generating income and promoting both the College in general and discipline in particular activity
3. Supporting admissions processes and procedures
4. Supporting examinations processes and procedures
5. Contributing to the work of College committees
6. Contributing to accreditation and quality control processes
7. Contributing to strategic planning

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility.

### **Person Specification**

The successful applicant will have an independent research programme that will strengthen and complement the existing team at the University. He/she will be able to demonstrate the following qualities and characteristics:

1. PhD in Physics, Astrophysics, or a related discipline
2. Sufficient knowledge specify to develop teaching and research programmes
3. A strong record in attracting research funding, or demonstrable potential to attract such funding.
4. Teamwork skills to work in collaboration with existing group members
5. An active and supportive approach to inter-disciplinary and multi-disciplinary research that will help to foster interactions and links both within the University and externally with other educational bodies, professional institutions and employers
6. The attitude and ability to engage in continuous professional development
7. The aptitude to develop familiarity with a variety of strategies to promote and assess learning
8. Enthusiasm for delivering undergraduate programmes
9. Demonstrate knowledge and experience of equality and diversity issues, and a commitment to providing an inclusive environment for staff and students.

**Informal Enquiries**

Before submitting an application you may wish to discuss the post further by contacting Professor Isabelle Baraffe telephone (01392 725123) or email [i.baraffe@exeter.ac.uk](mailto:i.baraffe@exeter.ac.uk).

## **THE POST**

<b>College:</b>	<b>College of Engineering, Mathematics and Physical Sciences</b>
<b>Post:</b>	<b>Senior Lecturer (Education and Research) in Astrophysics</b>
<b>Reference No:</b>	<b>P37013</b>
<b>Grade:</b>	<b>Grade G</b>
<b>Reporting To:</b>	<b>Pro Vice Chancellor</b>

The above full-time post is available immediately in the College.

### **Job Description**

The full job description (role profile) for Senior Lecturer (Education and Research) posts can be found on our website at [http://admin.exeter.ac.uk/personnel/academic\\_paths/academic\\_paths\\_tandr.shtml](http://admin.exeter.ac.uk/personnel/academic_paths/academic_paths_tandr.shtml). This summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility.

### **Main purpose of the job:**

To fulfil research, teaching and administration duties as a senior lecturer in academic area.

To contribute to extending the research profile of academic, particularly in areas related or complementary to existing define.

To contribute to the general operation of the College as a member of its academic team.

### **Research**

To contribute to enhancing the quality and quantity of Astrophysics research at Exeter in an area related or complementary to existing research strengths.

To conduct independent research and act as principal investigator and project leader, and in so doing:

1. Enhance the College's international reputation through research publications of appropriate quantity and quality, and contribute to worldwide debate at national and international conferences, and
2. Win research earnings through carefully prepared and successful grant applications as well as identifying potential income-generating programmes and collaborative partnerships.

To supervise research projects, managing any dedicated research staff and postgraduate research students.

To help promote a collegiate working atmosphere and stimulating environment that will attract further research staff of the highest quality as well as good postgraduate research students.

To contribute to the further and ongoing development of academic area research at Exeter, especially in the area of Astrophysics.

### **Teaching**

To develop and deliver undergraduate courses to appropriate academic standards such that:

1. Knowledge acquired from research translates to teaching
2. Accreditation by professional bodies is obtained where appropriate
3. Students are challenged but also tutored and supported with individual care
4. Teaching and learning techniques are innovative and inspiring

5. Students are supervised appropriately
6. Assessment criteria are appropriate, and fairly applied with results fed back to students appropriately
7. Module content is continuously reviewed to identify areas for improvement

### **General**

To contribute to the overall general and academic management in the College by undertaking activities that may be required such as:

1. Developing overall academic content and structure of modules with colleagues
2. Developing ideas for generating income
3. Supporting admissions processes and procedures
4. Supporting examinations processes and procedures
5. Contributing to the work of College committees
6. Contributing to accreditation and quality control processes

### **Person Specification for Senior Lecturer**

The successful applicant will have an independent, internationally-recognised research programme in an active field of academic area research related or complementary to existing Exeter strengths. He/she will be able to demonstrate the following qualities and characteristics:

1. PhD in Physics, Astrophysics, or a related discipline
  2. A strong record in attracting research funding, or demonstrable potential to attract such funding
- Teamwork skills to work in collaboration with existing group members
  - An active and supportive approach to inter-disciplinary and multi-disciplinary research that will help to foster interactions and links both within the University and externally
  - The attitude and ability to engage in continuous professional development
  - The aptitude to develop familiarity with a variety of strategies to promote and assess learning
  - Enthusiasm for delivering undergraduate and postgraduate programmes
  - A strong record of research grant capture
  - Proven academic leadership skills
  - Be an externally recognised authority in the broader subject area.
  - Demonstrate knowledge and experience of equality and diversity issues, and a commitment to providing an inclusive environment for staff and students.

### **Informal Enquiries**

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## **Job Description and Person Specification**

<b>Post</b>	Associate Professor (Education and Research) in Astrophysics
<b>College</b>	Engineering, Mathematics and Physical Sciences
<b>Reporting to</b>	Pro Vice Chancellor (PVC)

### **Summary of post**

The above full time post is available immediately. This post is primarily to support research and teaching activities in the area of Astrophysics. The post holder will be an innovative researcher with a strong and current record of research funding and international quality publications.

### **Main duties**

#### **Research and Scholarship**

1. Support the development and implementation of research strategy in particular in Astrophysics
2. Lead and co-ordinate research activity in the subject area of Astrophysics
3. Manage research and other collaborative partnerships with other educational institutions or other bodies.
4. Lead bids for research, consultancy and other additional funds.
5. Write publications of the appropriate defined standard or disseminate research findings using media appropriate to the discipline.
6. Conduct research into learning and teaching methodologies and disseminate best practice within the Institution and externally.
7. Develop and promote the use of innovative assessment methods.

#### **Liaison and Networking**

1. Lead and develop internal and external networks to foster collaboration and share information and ideas and to promote the subject and the Institution.
2. Participate in internal and external networks in relation to research and research funding. Teaching and teaching funding, and consultancy.
3. Promote and market the work of the College in the subject area both nationally and internationally.
4. Contribute to the enhancement of research quality and thinking in the field by being involved in quality assurance and other external decision making bodies.

#### **Managing people and managing resources**

1. Act as line manager for matters relating to the employment of staff and ensuring the work is allocated fairly, according to skills and capacity.
2. Carry out the role of an Academic Lead i.e. sustaining a shared sense of direction for the discipline and a shared participation in the University and Colleges' success through engagement with University and College strategies ensuring decisions are taken forward effectively by all staff they lead enabling, supporting and celebrating individual achievement.

3. Take overall responsibility for the organisation and deployment of resources within own areas of responsibility

### **Person Specification**

1. Be a leading authority in Astrophysics or related areas with an international reputation.
2. Possess in depth knowledge of specialism to enable the development of new knowledge, innovation and understanding in the field.
3. Possess a thorough understanding of institutional management systems and the wider higher education environment, including equal opportunities issues.
4. Have a strong record in attracting research funding.
5. Have an active and supportive approach to inter-disciplinary and multi-disciplinary research that will help to foster interactions and links both within the University and externally.
6. Demonstrate knowledge and experience of equality and diversity issues, and a commitment to providing an inclusive environment for staff and students.

### **Informal Enquiries**

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### **Terms & Conditions**

Our Terms and Conditions of Employment can be viewed [here](#).

### **Further Information**

Please see our [website](#) for further information on working at the University of Exeter.