



THE POST

College:	College of Engineering, Mathematics and Physical Sciences
Post:	Postdoctoral Research Fellow
Reference No:	P65875
Grade:	F
HERA:	RFEL
Reporting To:	Clare Dobbs

Job Description

Main purpose of the job:

To perform and analyse simulations of cluster formation in subsections of galaxies. There will be a number of aims of the research, including understanding how the properties of a molecular cloud determine the resulting properties of the stellar cluster, and the role of gas expulsion in cluster evolution. The research will include examining the role of different stellar feedback mechanisms in cluster formation and evolution. The applicant will work as part of a team also exploring wider aspects such as comparison to observations, e.g. GAIA, and longer term evolution of clusters.

Main duties and accountabilities:

1. To undertake research as appropriate to the field of study. The responsibilities may include all or some of the following:
 - Acting as principal investigator on research projects
 - Developing research objectives, projects and proposals
 - Conducting individual or collaborative research projects
 - Writing or contributing to publications or disseminating research findings using media appropriate to the discipline
 - Making presentations at conferences or exhibiting work in other appropriate events
 - Assessing, interpreting and evaluating outcomes of research
 - Developing new concepts and ideas to extend intellectual understanding
 - Resolving problems of meeting research objectives and deadlines
 - Developing ideas for generating income and promoting research area
 - Developing ideas for application of research outcomes
2. To contribute to teaching and learning programmes in the School and to supervise postgraduate research students.
3. To act as research team leader including:
 - Mentoring colleagues with less experience and advising on their professional development
 - Coaching and supporting colleagues in developing their research techniques
 - Supervising the work of others, for example in research teams or projects
 - Developing productive working relationships with other members of staff
 - Co-ordinating the work of colleagues to ensure equitable access to resources and facilities
 - Dealing with standard problems and help colleagues to resolve their concerns about progress in research

4. To routinely communicate complex and conceptual ideas to those with limited knowledge as well as to peers using high level skills and a range of media and to present the results of scientific research to sponsors and at conferences.
5. As determined by the nature of the project and at the direction of the PI, to plan, co-ordinate and implement research programme activity including:
 - Managing the use of research resources and ensuring that effective use is made of them
 - Monitoring and reporting on the use of research budgets
 - Helping to plan and implement commercial and consultancy activities
 - Where appropriate, to plan and manage own consultancy assignments

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. Please visit the Human Resources website to view the Research Fellow role profiles.

Person Specification

Competency	Essential	Desirable
Attainments/Qualifications	PhD or equivalent qualification/experience in a related field of study.	Be a nationally recognised authority in the subject area.
Skills and Understanding	Possess sufficient specialist knowledge in the discipline to develop/follow research programmes and methodologies. Record of research output in high quality publications.	
Prior Experience	Experience in performing hydrodynamic, radiative transfer or N-body calculations.	Experience in fields of star formation (including protoplanetary discs) or galaxy evolution.
Behavioural Characteristics	Excellent written and verbal communication skills. Able to communicate complex and conceptual ideas to a range of groups. Evidence of the ability to collaborate actively within the Institution and externally to complete research projects and advance thinking. Able to participate in and develop external networks. Able to balance the pressures of research, administrative demands and competing deadlines.	

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.