



**Job Title:** Research Associate in Theoretical Astrophysics

**Grade:** 7

**Salary:** £34,189 to £39,609 per annum

**Department:** Physics and Astronomy

**Hours/Contract:** Full time, open ended contract subject to fixed-term funding until 31 May 2021

**Job Reference:** 508

## Role Purpose

The project (“BuildingPlanS”) will use large suites of numerical simulations to link the architectures of observed exoplanet systems to their formation in protoplanetary discs. You will be expected to carry out independent and collaborative research for this project, and will also have opportunities to collaborate more widely within the Theoretical Astrophysics Group (whose existing research programme includes star and planet formation, AGN physics, accretion discs, galactic dynamics & dark matter).

Principal Responsibilities	% Time
<ul style="list-style-type: none"> <li>Responsible for personal and collaborative research, resulting in significant contributions to journal papers (often as lead author) and conference presentations in area of specified research.</li> </ul>	40
<ul style="list-style-type: none"> <li>Contribute to the overall research programme using innovative research models and approaches, testing and developing them to enable work to be carried out that will result in the emergence of new understanding within the research field.</li> </ul>	20
<ul style="list-style-type: none"> <li>Contributing to determining the direction of the programme in line with reaching the research goals. This will include elements of research planning and project management.</li> </ul>	10
<ul style="list-style-type: none"> <li>Co-supervision of research students and provision of advice and guidance to other members of the team, both research staff and students</li> </ul>	10
<ul style="list-style-type: none"> <li>Contributing to applications for travel grants and research proposals</li> </ul>	5
<ul style="list-style-type: none"> <li>To take a lead role in representing the research group by presenting research results at external scientific meetings and workshops, both in the UK and overseas</li> </ul>	10
<ul style="list-style-type: none"> <li>To undertake such duties consistent with the grade of the post as may be reasonably required</li> </ul>	5
Internal and External Relationships	
Regular attendance at conferences to provide advice and support to research staff and post graduate students working on this and similar research projects. To network and contribute to the maintenance of the wider research programmes profile and research area.	





**Planning and Organising**

Organisation of project report and deliverables. To organise meetings of the wider research programme. To foster new collaborations and to maintain a network of other research scientists elsewhere in the UK and overseas.  
To assist the PI in day-to-day planning and organisation of the wider research programme.  
You may be responsible for supervising research students.

**Qualifications, Knowledge and Experience**

**Essential**

- A good honours degree\*
- PhD in Astronomy or Astrophysics or a closely related subject area\*
- Evidence of research experience and skills in Theoretical Astrophysics\*
- Evidence of experience in presenting results at national & international meetings\*

**Desirable**

- Strong publication record in peer-reviewed journals\*
- Experience of parallel programming
- Research experience and skills in protoplanetary discs or planet migration\*
- Experience with numerical hydrodynamics\*
- Experience of collaboration.

**Skills, Abilities and Competencies**

**Essential**

- Ability to develop innovative approaches to modelling and interpretation of complex astrophysical systems\*
- High level of proficiency in English, sufficient to undertake research, teaching and administrative activities utilising English Language materials and to communicate effectively with staff and students.
- Computer programming skills or willingness to acquire them. \*
- Willingness to foster new collaborations with national and international experts.

**Desirable**

- Demonstrable success in producing publications of the very highest standard.
- Proven ability to work as part of a team.

***\*Criteria to be used in shortlisting candidates for interview***





## VITAL

The University encourages all staff to live our [VITAL values](#) which are:  
**Valuing People, Innovators, Together, Accountable, Leaders.**

## Equality and Diversity

We believe that equality, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equality support our efforts to attract a diverse range of high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equality, diversity and inclusion.

