

#### JOB DESCRIPTION

Job Title:	Postdoctoral Research Assistant in Astronomy	
Department / Unit:	Department of Physics	
Job type	Full time, Fixed Term	
Grade:	RHUL <sub>7</sub>	
Accountable to:	Dr Justyn Maund	
Accountable for:	N/A	

#### Purpose of the Post

Utilising simulations and observations (acquired with the Hubble Space Telescope, the William Herschel Telescope and other facilities) to explore the nature of the environments associated with supernovae and other constraints on the nature of the progenitor and the explosion.

#### **Key Tasks**

- To explore the physics of the environments associated with supernovae observed in other galaxies.
- To harness simulations and observations to understand the origins of these explosions.
- To explore the use of AI to support the aims of the project.
- To present results at international conferences and in peer-reviewed publications.
- To co-supervise research students working within the wider team and to synthesise results with other team members.

#### **Other Duties**

This job description reflects the present requirements of the post, and as duties and responsibilities change/develop, the job description will be reviewed and be subject to amendment in consultation with the post holder.

The post holder will carry out any other duties as are within the scope, spirit and purpose of the job as requested by the line manager or Head of Department/Division.

The post holder will actively follow RHUL policies including Equal Opportunities policies and be expected to give consideration within their role as to how they can actively advance equality of opportunity and good relations between people who share a relevant protected characteristics and people who do not share it.

The post holder will maintain an awareness and observation of Fire and Health & Safety Regulations.

The post holder will carry out their duties in a resource efficient way and actively support RHUL's Sustainability policies and objectives within the remit of their role.

The successful candidate will need to meet RHUL's expectations of core behaviours.

### Internal and external relationships

The following list is not exhaustive but the post holder will be required to liaise with: other members of staff within the school/department and University, academics in the following institutions and, where relevant, industrial or professional contacts.

Dr. Ning-Chen Sun (University of the Chinese Academy of Sciences)

Dr. Yi Yang (Tsinghua University)

Mr. Adam Singleton (University of Sheffield)

Dr. Gregory Ashton (RHUL)

Dr. Alessio Spurio Mancini (RHUL)

# ROYAL HOLLOWAY University of London

## PERSON SPECIFICATION FORM

Job Title: Postdoctoral Research Assistant in Astronomy

	Essential	Desirable
Knowledge, Education, Qualifications		
and Training		
Possess a PhD in astronomy change or be close to	×	
completion of a PhD in these areas (4 months).	^	
Have an understanding of the processes associated with	X	
the origins of supernovae.		
Have experience dealing with astronomical simulations.	X	
Publications in journals commensurate with career	X	
stage.	^	
Experience with Al/Machine Learning tools and		X
applications in astronomy		
Experience working with astronomical observations		X
Computer coding experience (Python, C++, R etc)		X
		^
Skills and/or Abilities		
Basic Research Skills	×	
Be a clear communicator.	X	
Be able to work in a diverse research team with respect	X	
for other team members		
Possess good time-management and organisational	X	
skills.		
Excellent attention to detail, including meeting		
deadlines	X	
Experience		
Experience of working in a receased environment	V	
Experience of working in a research environment Experience presenting research to academic audiences.	X	X
Experience developing independent research activities		X
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