UNIVERSITY OF NOTTINGHAM
RECRUITMENT ROLE PROFILE

Job Title: Research Associate/Fellow in large-scale galaxy environments

School/Department: School of Physics & Astronomy

Job Family and Level: Research & Teaching Level 4/4 Training Grade

Contract Status: This post is available from 1 April 2018 and will be offered on a fixed term contract until 31st March 2020

Hours of Work: Full-time

Location: University Park

Reporting to: Head of School

The Purpose of the New Roles:

This postdoctoral position is to investigate the effect of large-scale environment on the properties and evolution of galaxies. The research will focus on the in-fall regions and filaments that surround massive galaxy clusters and their role in galaxy evolution and cluster assembly. This work will take advantage of the new wide-field multi-object WEAVE spectrograph being built for the William Herschel telescope (La Palma Observatory) combined with state-of-the-art cosmological simulations of galaxy formation and evolution. The successful candidate will work with Prof. Alfonso Aragón-Salamanca, Dr Meghan Gray and Prof. Frazer Pearce and the Nottingham Astronomy Group.

	Main Responsibilities	**% time per year**
1.	To work on the projects that are currently under way at the University	
2.	To take a leading role in the projects mentioned above under the supervision of academic staff within the Astronomy group.	
3.	Specific tasks include: • Develop and apply software to analyse spectroscopic data from the WEAVE multi-object spectrograph and obtain redshifts, kinematics and stellar population properties of the galaxies. • Develop and apply tools and techniques to analyse cosmological simulations of galaxy formation and evolution to identify model galaxy properties and their environment. • Combine the observational and numerical results to identify galaxy environments and investigate how these environments affect the properties of the galaxies and their evolution. • Publish the results of this research in international refereed journals, and present them in relevant astronomy conferences. • To contribute to the Astronomy Group's outreach activities.	

This job description may be subject to revision following discussion with the person appointed and forms part of the contract of employment.

Knowledge, Skills, Qualifications & Experience

	Essential	Desirable
Qualifications/ Education	• BSc/MPhys Degree (or equivalent) in a Physics related subject • PhD (or equivalent, or expected to obtain shortly) in Astronomy or a closely related subject.	
Skills/Training	• Proficient use of Linux systems • Experience with data analysis software such as IRAF • Ability to program in high-level computer languages	
Experience	• Proven research track record in extragalactic astronomy. • Experience with large astronomical surveys OR experience in the quantitative analysis of cosmological simulations of galaxy formation and evolution.	• Experience with large astronomical surveys AND experience in the quantitative analysis of cosmological simulations of galaxy formation and evolution.
Personal Attributes	• Good written and oral communication skills • Good inter-personal skills • Ability to work independently and as part of a collaborative team	

Additional Information

Informal enquiries may be addressed to Professor Alfonso Aragón-Salamanca, tel: +44 115 951 6230 or email alfonso.aragon@nottingham.ac.uk. Please note that applications sent directly to this email address will not be accepted.

Applicants will be considered on an equal basis, subject to the relevant permission to work in the UK as defined by the requirements set out by the UK Border and Immigration Agency. Please visit http://www.ukba.homeoffice.gov.uk/ for more information.