

**Faculty of Technology**

**Institute of Cosmology and Gravitation**

**SENIOR RESEARCH ASSOCIATE**

**Fixed term contract for 2 years with a possible 3rd year extension contingent upon progress and funding**

**10006876**

**Information for Candidates**

**THE POST**

Please see the attached job description and person specification.

**TERMS OF APPOINTMENT**

Salary is in the range from £27,578 - £31,020 and progress to the top of the scale is by annual increments payable on 1 September each year. Salary is paid into a bank or building society monthly in arrears.

Working hours are 37 per week and are usually worked between 8.30 am and 5.15 pm Monday to Thursday and between 8.30 am and 4.15 pm on Friday with one hour and ten minutes for lunch. As this post is research based, working hours will vary depending on the needs of the project so a flexible approach is required. Specific working hours will be agreed once an appointment has been made. Overtime is not normally payable but time off in lieu may be given.

Annual leave entitlement is 35 working days in a full leave year. The leave year commences on 1 August and staff starting and leaving during that period accrue leave on a pro-rata basis. In addition, the University is normally closed from Christmas Eve until New Years Day inclusive and there are a further five bank holidays.

The Appointee will be entitled to join the Local Government Pension Scheme. The scheme's provisions include a final salary based, index-linked pension with an option to exchange some pension for a lump sum on retirement together with dependants’ benefits. Contributions by the employee are subject to tax relief.

There is a probationary period of six months during which new staff are expected to demonstrate their suitability for the post.

It is a condition of the appointment for the proper performance of the duties of the post that the appointee will take up residence at a location such that they are able to fulfil the full range of their contractual duties. This residential requirement will be expected to be fulfilled within twelve months of taking up the appointment. The University has a scheme of financial assistance towards the cost of relocation, a copy of which is available on request from Human Resources.

There is a comprehensive sickness and maternity benefits scheme.

It is the University's policy to take up references for candidates called for interview and to ask successful candidates to submit documentary evidence of their qualifications on taking up their appointment.

If the position has a requirement for a Criminal Records Bureau Disclosure, this will be stated in the advert. The Criminal Records Bureau Application Form will be provided once the selection process has been completed.

All applications must be submitted by Midnight (GMT) on the closing date published.

**UNIVERSITY OF PORTSMOUTH – RECRUITMENT PAPERWORK**

1. **JOB DESCRIPTION**

|  |  |
| --- | --- |
| **Job Title:** | Senior Research Associate (24 month fixed term) |
| **Faculty/Centre:** | Technology |
| **Department/Service:**  **Location:** | Institute of Cosmology and Gravitation  Dennis Sciama |
| **Position Reference No:** | 10006876 |
| **Cost Centre:** | 41950 |
| **Responsible to:** | ICG Director |
| **Responsible for:** | N/A |
| **Effective date of job description:** | November 2012 |

|  |
| --- |
| **Purpose of Job:** |
| Working autonomously with instruction from the research leader ultimately responsible for the project, (or group of studies), to carry out research developing new software and evaluation methods, determining how best to apply them, and analysing data. Responsible for regularly managing elements of the project in line with the project terms of reference.  To undertake active research and software development at international level in IFU galaxy evolution, including the analysis of large galaxy survey data from the project Mapping Nearby Galaxies at APO (MaNGA) as part of the fourth generation Sloan Digital Sky Survey. |

|  |
| --- |
| **Key Responsibilities:** |
| 1. To carry out software development and active research in galaxy evolution for the MaNGA project under the guidance of ICG staff. 2. To publish research work in refereed journals and to assist in disseminating the results on the worldwide web, and at seminars, conferences or other such activities. 3. To participate fully in the research activities of the funding grant and the Institute, including seminars and discussion meetings. 4. To promote the standing of the Institute and the research area, via research publications, seminar and conference talks, visits and attendance of meetings, public outreach activities. 5. To assist at a limited level (with a maximum of 6 hours per week), when called upon, in the administration, management and teaching (undergraduate tutoring and PhD research lectures) of the Institute. |

|  |
| --- |
| **Working Relationships (key individuals the job holder would be working with):** |
| ICG staff Dr Thomas and Dr Masters,  ICG Director,  Other ICG staff |

**PERSON SPECIFICATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Attributes** | **Rating** | **Source** |
| **1.** | **Specific Knowledge & Experience** |  |  |
|  | Excellent research-level understanding of galaxy evolution, and one or more of the following topics:  stellar populations, gas physics, stellar kinematics, galaxy formation modelling, statistics, galaxies at high redshifts, IFU data analysis | E | AF,S,R |
|  | Refereed journal publications either published or in the process of being published | E | AF,S |
|  | Experience with large spectroscopic data sets | D |  |
|  | Single-author or leading-author publications; strong citation record; talks at international conferences | D | AF,S |
|  | General knowledge of data analysis | D | AF,S,R |
|  | Knowledge or experience of the Sloan Digital Sky Survey (SDSS) or IFU surveys | D | AF,S,R |
|  | Extensive experience in the analysis of large optical spectroscopic datasets | D | AF,S,R |
|  | Experience in collecting data using optical/NIR telescopes | D | AF,S,R |
| **2.** | **Skills & Abilities** |  |  |
|  | Excellent skills in numerical computing and data analysis (e.g. IDL/Fortran/python) | E | AF,S,R |
|  | Experience with data processing and software development | D | AF,S,R |
|  | Skills in working with IFU spectroscopic data | D | AF,S,R |
|  | Observational skills in using telescopes to collect optical/NIR imaging data and/or spectroscopic data | D | AF,S,R |
|  | Oral and written communication skills | E | AF,S,R |
|  | Seminar / conference presentations | E | AF,S |
|  | Writing papers for publication | E | AF,S |
| **3.** | **Qualifications, Education & Training** |  |  |
|  | PhD in Physics, Astrophysics or Mathematics (awarded, or submitted within 3 months of start) | E | AF,S |
| **4.** | **Other Requirements** |  |  |
|  | Creative and self-motivated | E | AF,S,R |
|  | Able to work in team | E | AF,S,R |
|  | Willing to meet deadlines | E | AF,S,R |
|  | Willing to travel in the UK and overseas for research | E | AF,S |
|  | Ability to work in large international collaborations | D | AF,S,R |

**Legend**

Rating of attribute: E = essential; D = desirable

Source of evidence: AF = Application Form; S = Selection Programme; T = Test; P = Presentation, R=Reference letters

**JOB HAZARD IDENTIFICATION FORM**

|  |  |  |  |
| --- | --- | --- | --- |
| **Please tick box(s) if any of the below are likely to be encountered by the applicant.** | | | |
| International travel | √ | Ionising radiation |  |
| Manual Handling |  | Asbestos, Lead |  |
| Human tissue/body fluids  EPP Worker (Exposure Prone Procedures) |  | Driving on University business Mini-bus, Van, bus, forklift truck |  |
| Genetically modified Organisms |  | Food Handling |  |
| Noise > 80 DbA |  | Substances to which COSHH applies |  |
| Skin irritants/sensitisors |  | Small print /colour coding (electrical) |  |
| Night Duty  between 2200 hrs and 0600 hrs |  | Working at heights / with drains / in confined spaces |  |
| Display Screen Equipment | √ | Access to children |  |
| Repetitive tasks | | Stress (workplace/workload demands, changes within dept etc) | √ |
| Other (please specify) | | | |
| Please give details of any of the above as necessary:  International travel to attend conferences and collaboration meetings. | | | |

**Line Manager/Supervisor to sign below:**

|  |  |
| --- | --- |
| **Signed** |  |
| **Name (block capitals)** | Bob Nichol (ICG Director) |
| **Date** | 20/11/12 |
| **Extension number** | 3117 |