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**Faculty of Technology**

**Institute of Cosmology and Gravitation**

**Senior Specialist Technician**

**ZZ600384**

**Information for Candidates**

**THE POST**

Please see the attached job description and person specification.

**THE TERMS OF APPOINTMENT**

Full-time

Permanent

Salary is in the range £30,942 - £34,804 per annum and progress to the top of the scale is by annual increments payable on 1st April each year. Salary is paid into a bank or building society monthly in arrears.

The full-time standard University hours are 37 per week which are normally from 8.30 a.m. to 5.15 p.m. Monday to Thursday and 8.30 a.m. to 4.15 p.m. Friday with one hour and ten minutes for lunch.  Specific times may vary according to the Department concerned. If the position is part-time, the hours and days worked will either be as stated in the advert or discussed at interview/appointment. Overtime is not normally payable but time off in lieu may be given.

Annual leave entitlement is 32 working days in a full leave year. If you work less than 37 hours per week, your leave will be calculated on a pro-rata basis. The leave year commences on 1 October 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 Year’s Day inclusive and on bank holidays.

The Appointee will be entitled to join the Local Government Pension Scheme. The scheme's provisions include an 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.

There is a comprehensive sickness and maternity benefits scheme.

**All interview applicants will be required to bring their passport or full birth certificate and any other 'Right to Work' information to interview where it will be copied and verified.** The successful applicant will not be able to start work until their right to work documentation has been verified.

Please note if you are the successful candidate once the verbal offer of employment has been made and accepted, references will be immediately requested. It is the University’s policy that all employment covering the past three years is referenced. A minimum of two references is required to cover this three-year period of employment or study (where there has been no employment). One of your referees must be your current or most recent employer.

The successful candidate will need to bring documentary evidence of their qualifications to Human Resources on taking up their appointment.

To comply with UKVI legislation, non-EEA candidates are only eligible to apply for this post if it has been advertised for a total of 28 days.

If the position has a requirement for Disclosure and Barring Service check (DBS), this will be stated in the advert. The DBS Application Form will be provided once the selection process has been completed.

All applications must be submitted by 23:59 (UK time) on the closing date published.



**UNIVERSITY OF PORTSMOUTH – RECRUITMENT PAPERWORK**

1. **JOB DESCRIPTION**

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| --- | --- |
| **Job Title:** | Senior Specialist Technician |
| **Grade:** | 6 |
| **Faculty/Centre:** | Technology |
| **Department/Service:**  **Location:** | Institute of Cosmology and Gravitation  Dennis Sciama Building |
| **Position Reference No:** | ZZ600384 |
| **Cost Centre:** | 41950 |
| **Responsible to:** | Head of ICG Computing |
| **Responsible for:** | N/A |
| **Effective date of job description:** | September 2019 |

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| **Purpose of Job:** |
| 1. Maintain the SCIAMA High-Performance Computing (HPC) cluster on a day to day basis 2. Help staff, students and postdocs at ICG and their external collaborators to use SCIAMA 3. Monitor the usage of CPU and storage to ensure fair usage between users 4. Document the environment for new users and maintain the SCIAMA HPC website 5. Supervise future additions and upgrades to the machine |

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| **Key Responsibilities:** |
| 1. SCIAMA hardware monitoring and replacement (requires continuous monitoring) 2. Root access system admin (requires continuous monitoring) 3. Security and patch management 4. Account management 5. Aid ICG staff, students and external collaborators with general issues with running jobs on SCIAMA: installing, compiling and optimizing codes and libraries, job scripts, debugging runs 6. Job (queue) management (requires continuous monitoring) 7. ICG staff / student training on how to use SCIAMA 8. Liaise with hardware and software vendors with SCIAMA maintenance 9. Maintain current software licenses   Additional expectations:   1. Support the University’s commitment to equality, diversity, respect and dignity, creating an environment in which individuals will be treated on the basis of their merits, abilities and potential, regardless of gender, racial or national origin, disability, religion or belief, sexual orientation, age or family circumstances. 2. Comply with University Health and Safety policy. Report all accidents and unsafe circumstances to line management. 3. Participate in performance and development reviews (PDRs) 4. Coordinate with Information Services on SCIAMA operations as needed 5. Any other duties as reasonably required by the ICG Directors |

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| **Working Relationships:** |
| 1. Other ICG computing staff and members of ICG computing Committee 2. ICG Director(s) 3. ICG administrative staff 4. Information Services at UoP 5. Academic and research staff 6. Health and Safety Dept 7. Software and hardware vendors |

1. **PERSON SPECIFICATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Attributes** | **Rating** | **Source** |
| **1.** | **Specific Knowledge & Experience** |  |  |
| 1.1 | Knowledge of RHEL/Centos Unix OS | D | AF, S |
| 1.2 | Familiarity with the Lustre file system or similar | D | AF, S |
| 1.3 | Lustre disk / hardware maintenance | D | AF, S |
| 1.4 | Experience in daily operation of large computing facilities | E | AF, S |
| 1.5 | Knowledge of scientific software and scripting languages such as Python, C, Fortran and IDL | E | AF, S |
| 1.6 | Knowledge of latest computer information and trends | E | AF, S |
| 1.7 | Knowledge of parallel and high-performance computing (HPC) and the SLURM job scheduler (or similar) | E | AF, S |
| 1.8 | Experience in working with national or international teams and distributed collaborations | D | AF, S |
| 1.9 | Knowledge of parallel programming techniques such as MPI and OpenMP | D | AF, S |
| 1.10 | Experience in a university or industry research environment | D | AF, S |
| 1.11 | Familiarity with visualization software and techniques | D | AF, S |
| **2.** | **Skills & Abilities** |  |  |
| 2.1 | Ability to communicate effectively in English verbally and in writing | E | AF, S |
| 2.2 | Ability to work without close supervision | E | AF, S |
| 2.3 | Ability to work in a team | E | AF, S |
| 2.4 | Able to plan and organise own work and set priorities | E | AF, S |
| 2.5 | Able to install and maintain new software | E | AF, S |
| 2.6 | Able to solve problems when they occur and respond promptly to hardware and software failures | E | AF, S |
| 2.7 | Ability to work with staff and students with a variety of computing experience, from novice to expert | E | AF, S |
| 2.8 | Installing and operating grid computing | D | AF, S |
| 2.9 | GPU computing | D | AF, S |
| 2.10 | Cloud computing | D | AF, S |
| **3.** | **Qualifications, Education & Training** |  |  |
| 3.1 | An undergraduate degree in physics, astronomy, mathematics or other related disciplines such as computer science or engineering | E | AF, S |
| 3.2 | A MSc / PhD in physics, astronomy or mathematics (or other related disciplines such as computer science or engineering) | D | AF, S |
| 3.3 | Holds or has previously held a research-related position | D | AF, S |
| **4.** | **Other Requirements** |  |  |
| 4.1 | Willing to travel in the UK and overseas to relevant meetings | D | AF, S |
| 4.2 | Ability to meet deadlines | E | AF, S |
| 4.3 | Multi-tasking and prioritisation of tasks | E | AF, S |

**Legend**

Rating of attribute: E = essential; D = desirable

Source of evidence: AF = Application Form; S = Selection Programme (including Interview, Test, Presentation)

**JOB HAZARD IDENTIFICATION FORM**

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| **Please tick box(s) if any of the below are likely to be encountered in this role. This is in order to identify potential job related hazards and minimise associated health effects as far as possible. Please use the** [Job Hazard Information](http://www.port.ac.uk/departments/services/humanresources/occupationalhealthservice/jobhazardinformation/filetodownload,164407,en.doc) **document in order to do this and give details in the free text space provided.** | | | |
| 1. International travel/Fieldwork | x | 13. Substances to which COSHH regulations apply (including microorganisms, animal allergens, wood dust, chemicals, skin sensitizers and irritants, welding fume) |  |
| 1. Manual Handling (of loads/people) |  | 14. Working at height |  |
| 1. Human tissue/body fluids (e.g. Healthcare settings, First Aiders, Nursery workers, Laboratory workers) |  | 15. Working with sewage, drains, river or canal water |  |
| 1. Genetically Modified Organisms |  | 16. Confined spaces |  |
| 1. Noise > 80 DbA |  | 17. Vibrating tools |  |
| 1. Night Working   (between 2200 hrs and 0600 hrs) |  | 18. Diving |  |
| 1. Display screen equipment | x | 19. Compressed gases |  |
| 1. Repetitive tasks (e.g. pipette use etc) |  | 20. Small print/colour coding |  |
| 1. Ionising radiation/non-ionising radiation/lasers/UV radiation | | 21. Soil/bio-aerosols |  |
| 10. Asbestos and or lead | | 22. Nanomaterials | |
| 11. Driving on University business: mini- bus (over 9 seats), van, bus, forklift truck, drones only) | | 23. Workplace stressors (e.g. workload, relationships, job role etc)  x | |
| 12. Food handling | | 24. Other (please specify) | |

**Completed by Line Manager/Supervisor:**

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| **Name (block capitals)** | Daniel Whalen |
| **Date** | Sep 19 |
| **Extension number** | 3036 |

Managers should use this form and the information contained in it during induction of new staff to identify any training needs or requirement for referral to Occupational Health (OH).

Should any of this associated information be unavailable please contact OH (Tel: 023 9284 3187) so that appropriate advice can be given.