

# **Position Description**

College/Division:	College of Science			
Faculty/School/Centre:	Research School of Astronomy and Astrophysics			
Department/Unit:				
Position Title:	Postdoctoral Fellow			
Classification:	Academic Level A			
Position No:	TBC			
Responsible to:	Professor Naomi McClure-Griffiths			
Number of positions that report to this role:	NA			
Delegation(s) Assigned:	TBC			

## **PURPOSE STATEMENT:**

The ANU College of Science (CoS) comprises: the Research School of Astronomy and Astrophysics, the Research School of Biology, the Research School of Chemistry, the Research School of Earth Science, the Fenner School of Environment and Society, the Mathematical Sciences Institute, the Research School of Physics, and the Centre for the Public Awareness of Science. Staff and students within the ANU College of Science conduct research and delivers a research-led education program that encompasses the entire breadth of the sciences, supported by extensive international networks and by world-class facilities. The College has a strong tradition of research excellence that has fostered distinguished Nobel Laureates and Kyoto Prize winners and that trains scientific leaders in disciplines in which the ANU is consistently ranked in the top twenty in the world.

The ANU Research School of Astronomy and Astrophysics (RSAA) is the leading research school in Australia in the field of astronomy and astrophysics. Our staff and students have made major contributions to astronomy, mapping the structure and formation of the Milky Way, discovering planets orbiting other stars, measuring dark matter both within our Galaxy and in the wider Universe, and discovering the accelerating expansion of the Universe. Our astronomers include winners of the Prime Minister's Prize for Science and the Nobel Prize. The vibrant and diverse astronomical research community at RSAA has access to a broad array of facilities, including optical telescopes operated by ANU at Siding Spring Observatory (AAT 4m, ANU 2.3m, SkyMapper 1.3m, UKST 1.2m) and radio telescopes (ATCA, Parkes, ASKAP, MWA). ANU is a partner in the Giant Magellan Telescope (GMT) project and Australia is a member of the Square Kilometre Array and a strategic partner of the European Southern Observatory (ESO). RSAA has access to excellent computational facilities through the National Computational Infrastructure supercomputers, as well as in-house compute clusters. RSAA develops sophisticated astronomical and space hardware in the state-of-the-art facilities at our Advanced Technology and Instrumentation Centre.

The Postdoctoral Fellow is expected to undertake work in all three areas of academic activity —research, education and service (including outreach). The allocation of time to each area will be discussed with the position supervisor annually and be reflective of the appointees research agenda, school and interdisciplinary teaching requirements and leadership opportunities within the School environment. The Postdoctoral Fellow may also be required to supervise or assist in the supervision of students, and contribute cooperatively to the overall intellectual life of the School, College and University.

The Postdoctoral Fellow will work with Professor Naomi McClure-Griffiths as a member of the ASKAP surveys GASKAP and/or POSSUM on atomic hydrogen and/or magnetic fields in the Milky Way and Magellanic System.

## KEY ACCOUNTABILITY AREAS:

## Position Dimension & Relationships:

The Postdoctoral/Research Fellow will report to Professor Naomi McClure-Griffiths and be based within the Research School of Astronomy and Astrophysics, Mount Stromlo facilities in Canberra. The position will operate in partnership with other academic researchers within the School, CSIRO Astronomy & Space Science, and other Australian and international Universities.

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### **Role Statement:**

In their role as an Academic Level A the Postdoctoral Fellow is expected to:

- Undertake independent research in the area of galaxy and /or interstellar medium evolution with a view to publishing original and innovative results in refereed journals, present research at academic seminars and at national and international conferences, and collaborate with other researchers at a national level.
- Collaborate with senior staff to work in projects related to one of the following: the structure of magnetic fields in the Milky Way and/or nearby galaxies; the role of hydrogen gas in the evolution of the Milky Way or Magellanic Clouds; and/or the mutual interaction of the Magellanic Clouds.
- Collaborate with senior staff to actively seek and secure external funding, assist to prepare and submit research proposals to external funding bodies as appropriate.
- Contribute to the teaching activities of the School at the undergraduate and graduate levels. This includes, but is not limited to, the preparation and delivery of lectures and tutorials, the preparation of online material, marking and assessment, consultations, and with students or acting as subject coordinators.
- Supervise students working on individual or group projects at undergraduate, honours, graduate-coursework levels. Assist with supervision of research students.
- Assist to supervise research support staff in your research area.
- Actively contribute to all aspects of the operation of the School.
- Assist in outreach activities including to prospective students, research institutes, industry, government, the media and the general public.
- Maintain high academic standards in all education, research and administration endeavours.
- Take responsibility for their own workplace health and safety and not wilfully place at risk the health and safety of another person in the workplace.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.
- Other duties as required that are consistent with the classification of the position.

See minimum standards for academic staff 1

#### SKILL BASE

A Level A academic will work with the support and guidance from more senior academic staff and is expected to develop their expertise in teaching and research with an increasing degree of autonomy. A Level A academic will normally have completed four years of tertiary study or equivalent qualifications and experience and may be required to hold a relevant higher degree.

A Level A academic will normally contribute to teaching at the institution, at a level appropriate to the skills and experience of the staff member, engage in scholarly, research and/or professional activities appropriate to their profession or discipline, and undertake administration primarily relating to their activities at the institution. The contribution to teaching of Level A academics will be primarily at undergraduate and graduate diploma level.

## **SELECTION CRITERIA:**

- A PhD (or awarding of a PhD within six months of appointment commencement) in astronomy, astrophysics, or equivalent qualifications and experience in a related area, with a track record of independent research in the field of astronomy or astrophysics as evidenced by publications in peer-reviewed journals and conferences.
- Evidence of expertise in radio interferometry and/or large survey management
- An ability and commitment to contribute to bids for competitive external funding to support individual and collaborative research activities.
- Evidence of an ability and willingness to teach at all levels.
- The ability to assist in the supervision of students working on research projects.
- The ability to work as part of a team and to meet deadlines.
- Excellent oral and written English language skills and a demonstrated ability to communicate and interact effectively with a variety of staff and students in a cross-disciplinary academic environment and to foster respectful and productive working relationships with staff, students and colleagues at all levels.
- A demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

<sup>&</sup>lt;sup>1</sup>Schedule 4 - Human Resources - ANU

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The ANU conducts background checks on potential employees, and employment in this position is conditional on satisfactory results in accordance with the Background Checking Procedure which sets out the types of checks required by each type of position.						
Supervisor/Delegate Signature:		Date:				
Printed Name:	Professor Naomi McClure-Griffiths	Uni ID:				

References:		
Academic Minimum Standards		



# **Pre Employment Work Environment Report**

### Position Details

College/Div/Centre	College of Science	Dept/School/Section	Research School of Astronomy and Astrophysics
Position Title	Postdoctoral Fellow	Classification	Academic Level A
Position No.	TBC	Reference No.	

In accordance with the Work Health and Safety Act 2011 (Cth) the University has a primary duty of care, so far as reasonably practicable, to ensure the health and safety of all staff while they are at work in the University.

- This form must be completed by the supervisor of the advertised position and appended to the back of the Position Description.
- This form is used to advise potential applicants of work environment and health and safety hazards prior to application.
- Once an applicant has been selected for the position they must familiarise themselves with the University WHS Management System via Handbook guidance <a href="https://services.anu.edu.au/human-resources/health-safety/whs-management-system-handbook">https://services.anu.edu.au/human-resources/health-safety/whs-management-system-handbook</a>
- The hazards identified below are of generic nature in relation to the position. It is not correlated directly to training required for the specific staff to be engaged. Identification of individual WHS training needs must be in accordance with WHS Local Training Plan and through the WHS induction programs and Performance Development Review Process.
- 'Regular' hazards identified below must be listed as 'Essential' in the Selection Criteria see 'Employment Medical Procedures' at <a href="http://info.anu.edu.au/Policies/">http://info.anu.edu.au/Policies/</a> <a href="http://info.anu.edu.au/Policies/">DHR/Procedures/Employment Medical Procedures.asp</a>

#### Potential Hazards

Please indicate whether the duties associated with appointment will result in exposure to any of the following potential hazards, either as a regular or occasional part of the duties.							
TASK	regular	occasional		TASK		regular	occasional
key boarding	$\boxtimes$			laboratory work			
lifting, manual handling				work at heights			
repetitive manual tasks				work in confined spa	ices		
Organizing events				noise / vibration			
fieldwork & travel				electricity			
driving a vehicle							
NON-IONIZING RADIATION				IONIZING RADIAT	TON		
solar				gamma, x-rays			
ultraviolet				beta particles			
infra red				nuclear particles			
laser							
radio frequency							
CHEMICALS				BIOLOGICAL MAT	TERIALS		
hazardous substances				microbiological mate	erials		
allergens				potential biological allergens			
cytotoxics				laboratory animals or insects			
mutagens/teratogens/				clinical specimens, including			
carcinogens				blood			
pesticides / herbicides				genetically-manipula specimens	nted		
				immunisations			
OTHER POTENTIAL HAZARDS (please specify):							
Supervisor/Delegate Name:		Professor Nac	эті	McClure-Griffiths	Date:	July 2021	