

Position Description

Lecturer

Position Number: 00075628
Position Title: Lecturer
Date Written: July 2019

Faculty / Division: Faculty of Science
School / Unit: School of Physics
Position Level: Level B

ORGANISATIONAL ENVIRONMENT

UNSW is currently implementing a ten-year strategy to 2025 and our ambition for the next decade is nothing less than to establish UNSW as Australia's global university. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Following extensive consultation in 2015, we identified three strategic priority areas. Firstly, a drive for academic excellence in research and education. Universities are often classified as 'research intensive' or 'teaching intensive'. UNSW is proud to be an exemplar of both. We are amongst a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale. Secondly, a passion for social engagement, which improves lives through advancing equality, diversity, open debate and economic progress. Thirdly, a commitment to achieving global impact through sharing our capability in research and education in the highest quality partnerships with institutions in both developed and emerging societies. We regard the interplay of academic excellence, social engagement and global impact as the hallmarks of a great forward-looking 21st century university.

To achieve this ambition, we are attracting the very best academic and professional staff to play leadership roles in our organisation.

VALUES IN ACTION: OUR UNSW BEHAVIOURS

UNSW recognises the role of employees in driving a high-performance culture. The behavioural expectations for UNSW are below.



Delivers high performance and demonstrates service excellence.



Thinks creatively and develops new ways of working. Initiates and embraces change.



Works effectively within and across teams. Builds relationships with internal and external stakeholders to deliver on outcomes.



Values individual differences and contributions of all people and promotes inclusion.



Treats others with dignity and empathy. Communicates with integrity and openness.

OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY

The School of Physics is one of the leading Physics schools in Australia. It offers a world class undergraduate physics degree, as well as a postgraduate PhD research program for over 50 students. 33 academic staff conduct theoretical and experimental research in quantum physics, astrophysics, fundamental physics; and condensed matter physics. UNSW is an international leader in quantum computing research and hosts the ARC Centre for Quantum Computation and Communication Technology. Major nodes of two other ARC Centres: Exciton Science; and Future Low-Energy Electronics Technologies are also based at UNSW.

For further information about the school please visit www.physics.unsw.edu.au

The Astrophysics group within the School of Physics constitutes 9 faculty members working across a broad range of research areas including galaxy evolution, cosmology, galactic archaeology, exoplanets, the inter-stellar medium and Antarctic astronomy. The Australian astronomical community has access to the 4m Anglo-Australian Telescope and the ESO optical telescope suite as well as the Australian Square Kilometre Array Pathfinder (ASKAP). UNSW astrophysicists are closely involved with the upcoming Large Synoptic Survey Telescope, 4MOST and Giant Magellan Telescopes. UNSW Staff are also able to access the Katana computational cluster for their scientific computing needs.

The role of Lecturer will be specialising in any aspect of ASTRO-3D science including optical, infrared and radio astronomy directed towards understanding the evolution of matter, the chemical elements, and ionizing radiation in the Universe from the Epoch of Reionization to the present day. The role of Lecturer will actively contribute to the School's teaching activities across a range of undergraduate and postgraduate courses; this includes curriculum development, course administration and assessment. The Lecturer will also engage collaborative links within the School as well as externally, and secure competitive research funding.

The role of Lecturer will report to the Head of School, Scientia Professor Sven Rogge, and has no direct reports.

RESPONSIBILITIES

Specific responsibilities for this role include:

- Undertake independent research, publishing results in international refereed journals and collaborating with other researchers nationally and internationally.
- Actively seek external research grant income to support that research.
- Actively disseminate research findings at seminars and conferences within the School, the UNSW environment, nationally and internationally.
- Be responsible for overseeing the financial management of grants received for their research projects.
- Contribute to the teaching activities of the School at the undergraduate and graduate levels.
- Effectively coordinate and manage courses in both undergraduate and postgraduate programs.
- Actively engage students through the delivery of lectures and other learning activities developed through an evidence informed approach.
- Design and develop online and traditional resources to support student learning.
- Work collaboratively with others at UNSW to improve teaching within the School of Physics.
- Supervise Honours and Masters Course Work projects; and supervise PhD and Masters Research students.
- Actively participate in School activities and demonstrate an ability and willingness take on leadership roles in the School.

- Actively contribute to Astrophysics research group activities such as journal club.
- Ensure hazards and risks are identified and controlled for tasks, projects and activities that pose a health and safety risk within your area of responsibility.

SELECTION CRITERIA

- A PhD in astronomy, astrophysics, or a related field.
- A record of research productivity and publication in astrophysics, relative to career opportunity.
- Evidence of the ability or potential to attract research funding from competitive research bodies and other sources.
- Demonstrated experience in student supervision including but not limited to PhD, Honours, Masters, Vacation Scholar projects.
- Demonstrated capacity to deliver high quality teaching, especially at an undergraduate level.
- Demonstrated capacity to coordinate courses or programs.
- Demonstrated capacity to make innovative use of technology in teaching.
- Demonstrated ability to work as part of a team, to meet deadlines and to prioritise competing demands.
- Excellent verbal and written communication skills.
- High level of interpersonal skills and demonstrated competence in dealing with a wide range of people.
- Experience contributing to the administration in an academic environment.
- Ability and capacity to implement required UNSW health and safety policies and procedures.

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.