

SENIOR LECTURER

DEPARTMENT/UNIT	School of Physics and Astronomy
FACULTY/DIVISION	Faculty of Science
CLASSIFICATION	Level C
DESIGNATED CAMPUS OR LOCATION	Clayton campus

ORGANISATIONAL CONTEXT

At [Monash](#), work feels different. There's a sense of belonging, from contributing to something groundbreaking – a place where great things happen. You know you're part of something special and purposeful because, like Monash, your ambitions drive you to make change.

We have a clear purpose to deliver ground-breaking intensive research; a world-class education; a global ecosystem of enterprise – and we activate these to address some of the [challenges](#) of the age, Climate Change, Thriving Communities and Geopolitical Security.

We welcome and value difference and [diversity](#). When you come to work, you can be yourself, be a change-maker and develop your career in exciting ways with curious, energetic, inspiring and committed people and teams driven to make an impact – just like you.

Together with our [commitment to academic freedom](#), you will have access to quality research facilities, infrastructure, world class teaching spaces, and international collaboration opportunities.

We champion an [inclusive workplace culture](#) for our staff regardless of ethnicity or cultural background. We have also worked to improve [gender equality](#) for more than 30 years. Join the pursuit of our purpose to build a better future for ourselves and our communities – [#Changelt](#) with us.

The five Schools of the **Faculty of Science** offer a large and diverse range of disciplines in undergraduate and postgraduate courses. Ten Schools from other university faculties contribute to science teaching at all levels, allowing students to choose their studies from physical, biological, biomedical, behavioural, environmental, mathematical and computer sciences. The Faculty of Science has a strong research reputation. The faculty's research spans the theoretical to the applied, contributes to new knowledge and technologies, and challenges how we interact with the world. To learn more about the Faculty of Science, please visit our website: www.monash.edu/science/.

The **School of Physics and Astronomy** is a School located within the Faculty of Science. It aims to position itself as one of the top physics and astronomy research and teaching departments in Australia. The School is committed to teaching and research of the highest quality in astronomy, astrophysics, experimental physics, and theoretical physics. We are strongly committed to improving the diversity of our staff and students, and promoting a culture of equality, fairness, respect and openness. In 2023, the School received a Silver Pleiades Award - Recognising Commitment to Advancing Women in Astronomy. This is an important first step in affirming women within the School, one that we can build upon. Please visit <https://www.monash.edu/science/schools/physics>

Monash and the Faculty of Science values staff diversity and champions inclusive practices. We are committed to equitable decision making and apply the principles of [achievement relative to opportunity](#) in our selection processes.

The **Monash Astrophysics group** within SPA has vibrant programmes of research in theoretical, computational, and observational astrophysics. Their research spans much of astrophysics, including: star formation from the first stars to the present, stellar evolution, nucleosynthesis and Galactic chemical evolution, the Sun and solar systems, galaxies, white dwarfs, neutron stars, black holes, neutrinos and gravitational waves, supernovae and gamma-ray bursts.

The Monash **Physics Education Group** conducts research in student experience and retention, and in computational physics and astrophysics education.

POSITION PURPOSE

A Level C academic is expected to make significant contributions to the teaching effort of a department, school, faculty or other organisational unit or an interdisciplinary area. An academic at this level is also expected to play a major role in scholarship, research and/or professional activities.

This Senior Lectureship is a teaching-intensive academic position with the [Monash Astrophysics group](#) of the School of Physics and Astronomy, and is part of a significant strategic investment and commitment to this discipline area. The position represents an exciting opportunity to advance and complement this growing and vibrant teaching area within the School.

The Senior Lecturer will contribute to the School's innovative, evidence-based pedagogy in the undergraduate astrophysics curriculum. The position will entail a higher teaching load than a standard teaching and research lecturer position.

Reporting Line: The position reports to the Head of School of Physics and Astronomy

Supervisory Responsibilities: Teaching Associates

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level C academic may include:

1. The conduct of tutorials, practical classes, demonstrations, workshops, student field excursions, and/or studio sessions
2. Initiation and development of course material
3. Course coordination
4. The preparation and delivery of lectures and seminars

5. Supervision of the program of study of honours students or of postgraduate students engaged in course work
6. Supervision of major honours or postgraduate research projects
7. The conduct of research
8. Involvement in professional activity
9. Development of course material
10. Marking and assessment
11. Consultation with students
12. A range of administrative functions the majority of which are connected with the subjects in which the academic teaches
13. Attendance at departmental, school and/or faculty meetings and a major role in planning or committee work
14. Other duties as directed from time to time

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - A doctoral or masters qualification in the relevant discipline area or equivalent accreditation and standing.

Knowledge and Skills

2. Experience teaching astronomy and astrophysics for general audiences and physics/astrophysics majors
3. Experience developing teaching materials in astronomy and astrophysics
4. Experience integrating technology into the classroom, including the use of computational tools in teaching such as Python and Mathematica
5. Experience with evidence-based best practices from astronomy education research and physics education research
6. Possess a high level of interpersonal skills and demonstrated ability to work independently and as part of a team
7. Demonstrated ability to produce peer reviewed publications, conference proceedings, or conference presentations in astronomy/astrophysics
8. Ability to work positively and cooperatively with students, internal and external teams and external organisations
9. Demonstrated strong record of teaching experience in a tertiary environment including course coordination
10. Demonstrated ability to motivate, actively engage and educate a given audience
11. Demonstrated experience in curriculum and subject material development
12. Proven ability, commitment and passion for engaging in scholarly and research activities
13. A demonstrated capacity to work in a collegiate manner with other staff in the workplace

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted
- A current satisfactory Working With Children Check is required

GOVERNANCE

Monash University expects staff to appropriately balance risk and reward in a manner that is sustainable to its long-term future, contribute to a culture of honesty and integrity, and provide an environment that is safe, secure and inclusive. Ensure you are aware of and adhere to University policies relevant to the duties undertaken and the values of the University. This is a standard which the University sees as the benchmark for all of its activities in Australia and internationally.