



SENIOR LECTURER

DEPARTMENT/UNIT	School of Physics and Astronomy
FACULTY/DIVISION	Faculty of Science
CLASSIFICATION	Level C
DESIGNATED CAMPUS OR LOCATION	Clayton campus and European Laboratory for Particle Physics (CERN)

ORGANISATIONAL CONTEXT

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu.

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 the most recent national audit of research excellence (ERA 2018), the School achieved the maximum overall rating of 5 for Physical Sciences, including the maximum rating of 5 in each of our assessed fields of research (spanning astronomy & astrophysics, atomic & molecular physics, nuclear physics, particle physics, condensed matter physics and optics). Currently the School has 30 academic staff, 35 research-only staff and 17 adjunct staff, supported by 14 professional staff. In 2019, the School's total recurrent income was approximately \$20M, with research income in the past four years totalling >\$40M. Please visit www.monash.edu/science/schools/physics.

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.

The successful candidate will take a leading role in the Monash Warwick Alliance in Particle Physics. The purpose of the Alliance is to strengthen the particle physics activities at both universities by exploiting different areas of expertise. The Alliance has created a number of shared projects and has a total funding of \$7M over the period from 2020 to 2025. The successful candidate will build an outstanding research programme in particle physics, develop an international profile and attract external funding from National Competitive Grants. The research will take advantage of the membership of Monash University in the LHCb experiment. The position might be placed for a substantial amount of the time at CERN during the first three years. There will be a key involvement in the supervision of PhD students that are dual registered at Monash and Warwick Universities.

The School aspires to be the pre-eminent institution within Australia for the delivery of innovative, active learning across the undergraduate curriculum. The incumbent will contribute to innovative evidence-based pedagogy in the undergraduate physics curriculum. While placed at CERN, there will be a reduced involvement in undergraduate teaching.

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

Supervisory Responsibilities: Research Fellows (Postdocs), Teaching Associates, Honours and Masters students, and Higher Degree by Research (PhD) students

Financial Delegation: Not applicable

Budgetary Responsibilities: Not applicable

KEY RESPONSIBILITIES

Specific duties required of a Level C academic may include:

1. Lead and deliver innovative teaching programmes, including the preparation and development of course material, and delivery of lectures, e-learning and group teaching
2. Provide leadership in the undergraduate physics teaching programme, and in curriculum development in particle physics
3. Acting as subject coordinators
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. Establish a strong, individual and independent programme of research, publish research outcomes, including publications in high impact journals
8. Apply for National Competitive Research grants
9. Initiate, develop and take leadership in collaborations with other research groups in the School, within Monash, Australia, and internationally
10. Marking and assessment
11. Consultation with students
12. Propose and develop strategic objectives in particle physics for the School
13. A range of administrative functions

14. Attendance at departmental, school and/or faculty meetings and/or membership of a number of committees
15. Other strategic initiatives as directed by the Head of School
16. 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 and/or recognised significant experience in the relevant discipline area.

Knowledge and Skills

2. A strong record of research achievements within the broad area of particle physics, including citations and significant publications in the highest impact journals
3. Evidence of having developed a significant independent research program
4. A track record of attracting National Competitive Grants to fund research
5. Excellent written and verbal communication skills necessary to carry out the duties of the position
6. Possess a high level of interpersonal skills and demonstrated ability to work independently and as part of a team across both the education and service sectors
7. Ability to work positively and cooperatively with students, internal and external teams and external organisations
8. Prior experience in teaching undergraduate physics, including developing a course programme, delivery of lectures, laboratory programmes; and small group teaching
9. Demonstrated ability to motivate, actively engage and educate a given audience
10. 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.