



PROFESSOR AND HEAD OF SCHOOL OF PHYSICS AND ASTRONOMY

DEPARTMENT/UNIT	School of Physics and Astronomy
FACULTY/DIVISION	Faculty of Science
CLASSIFICATION	Level E
WORK LOCATION	Clayton campus

ORGANISATIONAL CONTEXT

Monash is full of thinkers and doers who are looking for their next challenge. So if you've forged a rewarding career so far, this role provides the perfect platform to join us and thrive. You'll have access to quality research facilities, infrastructure and teaching spaces to do exciting work, along with opportunities to collaborate internationally. You'll be part of a university that's made up of inspirational people to help you continue doing work that makes a lasting impact. Discover more at www.monash.edu.

The **Faculty of Science** is at the forefront of innovation in our research, teaching and in forging partnerships with industry, government and individual supporters. Our five schools offer a large and diverse range of disciplines in undergraduate and postgraduate courses. In addition, ten schools from other university faculties contribute to science teaching at all levels, allowing science students to choose their studies from physical, biological, biomedical, behavioural, environmental, mathematical and computer sciences. In terms of research, our respected researchers are at the top of their game. Their work spans the theoretical to the applied, contributes to new knowledge and technologies, and challenges how we interact with the world. The Faculty of Science at Monash University is at the forefront of innovation and discovery in biology, chemistry, physics & astronomy, mathematics and earth, atmospheric and environmental sciences. Please visit our [faculty website](#).

The **School of Physics and Astronomy** is passionate about creating a truly collaborative learning and research environment, where students drive their own learning and benefit first hand from our world-leading research programs. The School is going through an exciting period of renewal - investing significantly in people and facilities. We provide research opportunities for creative students and scientists to work on a wide range of fundamental research topics, which will have impact for future generations - including: astronomy and astrophysics, atomic and molecular physics, biophotonics, biomedical imaging, gravitational wave astronomy and cosmology, condensed matter physics, high energy particle physics, quantum science and synchrotron science.

The School has consolidated its research activities within four broad research themes, which cover the full range of activities in physics and astronomy:-

1. **New Windows on the Universe** – comprising computational astrophysics, observational astronomy, high energy astrophysics, exoplanets and gravitational wave astrophysics
2. **The New Quantum Revolution** – comprising atomic and molecular physics, condensed matter physics and materials/nanophysics, quantum computing and quantum measurement/metrology, ultracold atomic gases
3. **The Quest for New Physics and Symmetries** – comprising high energy particle physics (the standard model), and physics beyond the standard model (SUSY, matter/antimatter asymmetry, dark matter, etc.), particle cosmology and particle astrophysics
4. **New Ways of Seeing and Understanding the Physical World** – comprising optics with atoms, electrons, light and X-Rays, biophotonics, electron microscopy and diffraction physics, X-Ray and synchrotron science, and foundations of image processing

Within each of these themes there are both established research strengths, as well as emerging and new opportunities to expand and diversify what we currently do. The School's strategic plan aims to achieve research excellence, benchmarked against the best national and international institutions; it is focused on creating forward-looking research culture of scientific leadership. Please [visit our website](#) to find out more about the School.

POSITION PURPOSE

The Head, School of Physics and Astronomy will be expected to bring a strong personal commitment and reputation in both research and education. Eminently credible, the incumbent will drive the ongoing international profile of our Physics, Astrophysics/Astronomy and interdisciplinary research whilst simultaneously leading traditional and innovative pedagogical activities in order to ensure that our students' university experience is of the highest standard and their skills are recognised and highly valued by employers.

A Level E academic is expected to exercise a special responsibility in providing strong leadership and in fostering excellence in research (both fundamental and inter-disciplinary), teaching, professional activities and policy development in the academic discipline within the School, within the University and within the community, both scholarly and general.

Reporting Line: The position reports to the Dean, faculty of Science

Supervisory Responsibilities: This position provides direct supervision to 32 FTE staff and has oversight of an additional 50 research and professional staff with the School

Financial Delegation: Yes, in accordance with the University Delegation Schedule

Budgetary Responsibilities: Yes, in line with Key Responsibilities

APPOINTMENT PERIOD

The professorial appointment will be a continuing appointment in the School of Physics and Astronomy and will include the role of Head of School for an initial period of up to 5 years with opportunity for renewal.

KEY RESPONSIBILITIES

Specific duties required may include:

1. Provide high-level strategic leadership to the School that is aligned with faculty and university strategic plans by managing, administering and fostering excellence in teaching, research and professional activities
2. Take responsibility for staff leadership and management, including team building, recruitment and selection, performance management and staff development ensuring equitable management of staff workload, including teaching, research and administration

3. Actively engage in a specialist research area in line with the Faculty's research strategy, by maintaining a substantial active high quality publications record and supervising and mentoring early career researchers and research students
4. Foster research excellence through procuring competitive research grants, leading significant research projects and working with other staff to develop research links
5. Provide strong and committed leadership in teaching, curriculum development and research training by participating in the faculty's curriculum planning and development processes, academic committees, and relevant examination processes in addition to monitoring the quality of individual teaching in the relevant discipline
6. Provide innovative and effective leadership for the expansion of the faculty's HDR (both PhD and coursework MSc) program to attract high quality HDR students
7. Work collaboratively with key staff across the Faculty and broader University community and support the Dean as a trusted advisor in the development of a Faculty of Science which is acknowledged as world class
8. Maintain and broaden collaborative partnerships with relevant faculties and departments/schools within the University and community
9. Develop, maintain, and broaden enduring collaborative partnerships with external agencies and industry both nationally and internationally, making a significant contribution to the profession
10. Exercise strong budget management for the project(s) managed to a value of approx. \$30m

KEY SELECTION CRITERIA

Education/Qualifications

1. The appointee will have:
 - A doctoral qualification and recognition as a leading authority in Physics or Astronomy/Astrophysics

Knowledge and Skills

2. Evidence of outstanding scholarly activity of an international standard in Physics or Astronomy/Astrophysics including significant publications and citations in the highest impact journals, a consistent record of high-level research engagement and productivity and a demonstrated continuing commitment to one or more programs of research
3. Highly developed interpersonal and communication skills including the ability to liaise effectively with other academics, to mentor and develop staff and to represent and advocate for the School as a contributing member on various boards and committees within the faculty and the University
4. Demonstrated experience in various facets of academic management including the necessary leadership, strategic planning, financial, human resources and decision-making skills needed to manage a school/department
5. Evidence of collaborative and/or interdisciplinary research projects and the ability to foster a strong internationally competitive research culture
6. Demonstrated ability to attract external funding in the form of both national competitive grants and other research income and in building links with industry, government, funding and professional bodies
7. Evidence of innovation in curriculum development, course design and course management and proven excellence in teaching
8. A vision for the future needs and development of Physics and Astronomy/Astrophysics within Australia and internationally, from both research and educational perspectives

OTHER JOB RELATED INFORMATION

- Travel to other campuses of the University may be required
- This position will require a successful National Police Record check
- 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

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.