

Position Title: Research Associate

Position Classification: Level A

Position Number: NEW

Faculty/Office: Engineering and Mathematical Sciences

School/Division: Physics, Mathematics and Computer Science

Centre/Section: International Centre for Radio Astronomy Research

(ICRAR)

Supervisor Title: Research Fellow

Supervisor Position Number: 00090525

Your work area

ICRAR is a WA State funded high profile equal joint venture established in 2009 between Curtin University and The University of Western Australia (UWA). The Centre's headquarters are located at UWA, with research nodes at both UWA and Curtin. ICRAR is one of the lead Australian organisations participating in the international Square Kilometre Array (SKA) Project. ICRAR has been further funded from 2019 to 2024 with \$25 Million by the WA State Government and equal contribution from the Joint Venture Universities. ICRAR is one of the largest astronomy organisations in Australia.

Reporting Structure



Your role

We are looking for a highly motivated and suitably qualified candidate to join the local and distant Universe science units at the International Centre for Radio Astronomy Research (ICRAR). The successful candidate will work on multiwavelength observations of galaxies (primarily optical integral-field spectroscopic and HI spectral-line studies), aimed at understanding the physical processes driving galaxy transformation and affecting the star formation activity and stellar/gas angular momentum of galaxies. The appointee will work under the supervision of Dr. Luca Cortese, will join one of the most active and rapidly growing research institutes in Australia and will be able to contribute to the scientific exploitation of state-of-the-art multiwavelength surveys, including SAMI, HECTOR, xGASS and WALLABY.

ICRAR astronomers have access to a wide range of observational facilities (including ESO facilities, the AAT, ATCA and ASKAP), as well as to the nearby Pawsey supercomputing centre. The appointment will be for three years, and will include adequate funding to attend international conferences.

The PDRA will be based at the ICRAR headquarters at the beautiful Matilda Bay campus of UWA. Perth (Western Australia) is listed as one of the world's most liveable cities and offers an excellent ocean-side lifestyle.

Weblinks:

ICRAR: https://www.icrar.org

SAMI: https://sami-survey.org/

HECTOR: https://www.aao.gov.au/technology/new-instruments/hector

xGASS: http://xgass.icrar.org/

WALLABY: https://wallaby-survey.org/

Key responsibilities

• Lead science publications related to galaxy formation and evolution using a combination of multiwavelength data (e.g., integral field spectroscopy and HI line data).

- Lead new observing proposals through facilities such as ALMA and ESO.
- Contribute generally to the development of data reduction and/or quality control for optical integral field and/or HI-line surveys (e.g., HECTOR, WALLABY).
- Contribute to the supervision of Masters and PhD students.

Your specific work capabilities (selection criteria)

- Have a PhD in a field relevant to extragalactic astronomy. [Essential]
- Experience in extragalactic astronomy (esp. galaxy evolution) research, attested by a good publication record. [Essential]
- Excellent oral and written communication skills. [Essential]
- Demonstrated ability to work independently, show initiative and work productively as part of a team. [Essential]
- Experience in the analysis of optical spectroscopic data. [Desirable]
- Experience in the analysis of HI spectral line observations. [Desirable]
- Experience in leading observing proposals. [Desirable]
- Experience in either spectral energy distribution or velocity field reconstruction. [Desirable]

Compliance

Workplace Health and Safety

All supervising staff are required to undertake effective measures to ensure compliance with the Occupational Safety and Health Act 1984 and related University requirements (including Safety, Health and Wellbeing Objectives and Targets).

All staff must comply with requirements of the Occupational Safety and Health Act and all reasonable directives given in relation to health and safety at work, to ensure compliance with University and Legislative health and safety requirements.

Details of the safety obligations can be accessed at http://www.safety.uwa.edu.au

Equity and Diversity

All staff members are required to comply with the University's Code of Ethics and Code of Conduct and Equity and Diversity principles. Details of the University policies on these can be accessed at http://www.hr.uwa.edu.au/publications/code_of_ethics, http://www.equity.uwa.edu.au