



**UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
FACULTY OF SCIENCE**

Professor in Radio Astronomy

SCHOOL OF PHYSICS

The **School of Physics** in the Faculty of Science invites applications for a Professorship in Radio Astronomy, in a joint initiative with the South African Radio Astronomy Observatory (SARAO) and the National Research Foundation (NRF).

The School is host to the newly approved Wits Centre for Astrophysics, whose members carry out leading research across the electromagnetic spectrum, as well as multi-messenger astronomy, including gravitational wave and neutrino astrophysics, and dark matter direct detection. Members of the Centre are active users of several Southern African facilities, including MeerKAT, SALT, HESS, and the nearby HartRAO radio observatory, including the 26-metre radio telescope which is part of the European VLBI Network. Members have extensive formal links with local and international collaborations, including the MeerKAT Large Survey Projects, SKA Science Working Groups, the Event Horizon Telescope Collaboration, HESS and CTA, KM3NeT, HIRAX, AGILE, amongst others. The Centre has a wide range of observational, theoretical, and instrumental experience, with an active emphasis on the interconnect between them. The School of Physics offers an Astronomy and Astrophysics undergraduate Programme with a strong observational and theoretical foundation to students who proceed to post-graduate studies.

More broadly, the School of Physics, the largest in the country, engages in internationally competitive research within very diverse fields, some emerging and some established, including theoretical and experimental high energy physics, materials physics, condensed matter physics, nuclear physics, astronomy, astrophysics and astro-particle physics, high-throughput electronics, photonics, space propulsion, and physics education. The School hosts three DSI-NRF Chairs (including the SKA Chair in Radio Astronomy) and is home to the Materials Physics Research Institute with significant experimental infrastructure, the Mandelstam Institute for Theoretical Physics, the Institute for Collider Particle Physics, the Nuclear Structure Research Group and The WitsQ Research Group focused on quantum computing and related technologies. The School of Physics plays an important role in the Centre of Excellence in Strong Materials, and hosts the Gauteng node of the National Institute for Theoretical Physics. In addition, the School has an active teaching programme that reaches over 3000 students annually and an outreach programme that includes a Planetarium.

Qualifications: Requirements include: a PhD in astronomy, astrophysics, or related areas; evidence of a distinguished research profile in observational radio astronomy, including an excellent publication record; a background and research plans connected to SKA science areas, including those to be explored by precursor instruments such as MeerKAT; experience in post-graduate supervision. Final selection will be made on the basis of scholarship and potential to contribute to the expansion of the Wits Centre for Astrophysics and further enhance the reputation of the School of Physics.

Duties: Professors are expected to lead a research group, including the mentoring of post-graduate students and the pursuit of independent research, teach and participate in the administration of the School, Faculty and University. The position includes a very generous research grant with funds for post-graduate student bursaries, postdoctoral fellows, and running costs and administration.

Applications: Submit a cover letter accompanied by a detailed *curriculum vitae*, indicating research and teaching experience, NRF rating (if available), a research proposal and teaching portfolio, certified copies of all educational qualifications and identity/passport document and the names and email addresses of three referees.

To apply: External applicants are invited to apply by registering their profile on the Wits i-Recruitment platform located at <https://irec.wits.ac.za> and submitting applications. Internal applicants are invited to apply directly on Oracle by following the path: iWits /Self Service Applications /"Apply for a job".

Enquiries: For further information contact the Head of School, Professor Deena Naidoo, email Deena.Naidoo@wits.ac.za and the Director of the Wits Centre for Astrophysics, Professor Roger Deane, email Roger.Deane@wits.ac.za.

Correspondence will be entered into with short-listed candidates only. Short-listed applicants must be available for a personal or telephonic interview.

Closing date: 30 May 2021

The University reserves the right not to make an appointment and continue searching after the closing date and only short-listed candidates will be contacted.

"The University is committed to employment equity. Preference will be given to appointable applicants from underrepresented designated groups in terms of the relevant employment equity plan and policies of the university".