Postdoctoral position in Radio Astronomy / Machine Learning

Rhodes University (RU) invites applications for a postdoctoral position in extragalactic radio astronomy and machine learning. The successful candidate will join the Centre for Radio Astronomy Techniques and Technologies (RATT) group and will work closely with Dr Kenda Knowles and Dr Emma Tolley (EPFL, Switzerland) on science and machine learning applications using MeerKAT galaxy cluster data. The position is for one year, with the possibility of renewal depending on performance, up to a maximum duration of three years.

Project description:
We are seeking talented postdoctoral candidates to work on high-impact astrophysics research using the world-leading MeerKAT array, while developing observation-driven mock data for machine learning research in order to improve the efficiency of the technical aspects of radio data reduction and analysis. The science focus of our synergistic approach is on the environment of galaxy clusters, a key science area for the SKA.

Key Requirements:
- PhD in Astrophysics / Astronomy / Cosmology
- Expertise in galaxy cluster physics
- Full working proficiency of the English language

Additional competencies:
- Experience in machine learning / deep learning applications
- Proficiency in radio data reduction and processing

FTE:
- 70% or higher on prescribed joint South Africa/Switzerland project
- Up to 30% on self-driven science, complementary to RATT interests

How to Apply:
An application should include
- A motivation letter (max 1 page)
- A curriculum vitae (incl. publications)
- A summary of research experience and interests (max 3 pages)

All documents should be concatenated into a single PDF submission and sent to k.knowles@ru.ac.za by no later than 30 September 2023 with the subject line "RadioClusters - RU Postdoc Application - Applicant name".

Applicants should also arrange for two (2) letters of reference to be sent by the referees to k.knowles@ru.ac.za by no later than 30 September 2023, with the subject line "RadioClusters - Reference - Applicant name".

Only complete applications will be considered.