



**POSTDOCTORAL FELLOWSHIPS IN OBSERVATIONAL RADIO ASTRONOMY
AND RADIO ASTRONOMY TECHNIQUES & TECHNOLOGIES**

The Rhodes University Centre for Radio Astronomy Techniques & Technologies ([RATT](#)) is calling for applications for 3-year postdoctoral fellowships in observational radio astronomy and/or radio astronomy techniques and technologies. RATT was established around the eponymous SKA Research Chair at Rhodes held by Prof Oleg Smirnov. In collaboration with the Radio Astronomy Research Group (RARG) of the South African Radio Astronomy Observatory ([SARAO](#), Cape Town, South Africa), RATT conducts research into novel radio astronomy calibration, imaging, data analysis algorithms, software and techniques that are urgently required by the next generation of radio telescopes and by the science they are designed to deliver, with a particular focus on MeerKAT data processing. Most RATT-affiliated researchers are members of the various MeerKAT Large Survey Projects, and are leading and/or are actively involved in the recently awarded MeerKAT open time proposals.

We are looking for two kinds of candidates: observational radio astronomers with experience in data reduction and an interest in techniques, algorithms and software, or mathematicians and/or signal processing specialists with an interest in developing algorithms and software for radio astronomy. The ideal candidate will have proven software development skills and will be motivated to develop and/or validate new radio data processing algorithms. The candidates will be able to (and will be expected to) spend a significant fraction of their time on their own research projects, with a strong focus on MeerKAT science. Collaboration with other institutions worldwide, and participation in observational programs with leading radio observatories (EVLA, LOFAR, E-MERLIN, GMRT, WSRT, ATCA, EVN, ALMA, ASKAP, etc.) will be actively encouraged, as will collaboration with groups at South African universities.

The positions will be based at Rhodes University (Makhanda) and/or at SARAO (Cape Town). The value of the fellowship will be pegged at the standard SARAO post-doctoral bursary level, and adjusted annually for inflation. The 2019 level is ZAR 390,000 p.a., tax-free. Additional equipment and travel funding will be available as necessary. The appointment is for two years, with a one-year extension subject to satisfactory progress.

Expressions of interest and applications should be sent by email to Prof Smirnov and (o.smirnov@ru.ac.za). The application should consist of a single PDF including a motivation letter, CV, publication list, and names of 3 references. Screening of candidates will start in December 2019, and will continue until the positions are filled.