South African Radio Astronomy Observatory
Human Capital Development Programme

Radio Astronomy Advancement Programme (RAAP)

Call for Proposals for Funding for 2019

Closing Date for Proposals: 31 January 2019

1. **What is the Radio Astronomy Advancement Programme?**

   1.1. The objective of the Radio Astronomy Advancement Programme (RAAP) is to fund interventions, mostly workshops, that will contribute to the development of necessary scarce skills in radio astronomy-relevant science and engineering, within SARAO, the general radio astronomy community in South Africa, and in the SKA partner countries in Africa.

   1.2. The programme is coordinated within the Human Capital Development (HCD) portfolio.

2. **Who can apply for a RAAP Grant?**

   SARAO staff, which includes permanent staff members and staff on fixed-term or joint contracts, may apply for RAAP grants, to arrange and facilitate workshops that will develop necessary skills and experience in radio astronomy science or engineering.

3. **Which skills will be considered for RAAP Funding in 2019?**

   For 2019, applications that propose to develop skills in one or more of the following areas will be considered for support:

   1. Advanced Programming Skills (includes Parallel, GPU, Scientific computing)
   2. Radio Astronomy Pipeline Development
   3. Radio Astronomy Calibration Techniques
   4. Data Engineering
   5. Computer Engineering
   6. Information Security
   7. High Performance Computing (includes Storage, Archive file systems, etc)
   8. Machine Learning

9. Digital Signal Processing (DSP)
10. FPGA Development
11. System Engineering
12. Software Development

PLEASE NOTE: To ensure that the proposed workshop is in line with the scarce skills needs of SARAO, it is highly recommended that applicants consult with both the Chief Scientist and Chief Technologist on the topic and content of the proposed workshop BEFORE submitting a formal application to HCD.

4. How many RAAP Grants are available for 2019?

SARAO HCD has budget to award up to three grants, at a maximum value of R450,000 per grant.

5. What criteria will be used to evaluate the proposals for RAAP Grants?

A panel, selected by the Chief Scientist and Chief Technologist, will evaluate proposals using the following:

5.1. Relevance and significance of the skills outputs proposed, to radio astronomy science or engineering, and specifically to the SKA and MeerKAT radio telescopes.

5.2. The potential of the workshop to achieve the skills outputs and objectives proposed, the level of experience of the facilitators, and the availability of the necessary equipment and infrastructure to achieve the objectives proposed.

5.3. Cost effectiveness of the workshop and budget confidence.

6. What are the terms and conditions of a RAAP Grant?

6.1. Workshops funded with a RAAP grant must ensure the development of important and relevant skills, and the target audience of the workshops must be junior SARAO staff and/or postgraduate students studying at South African and SKA partner country universities, whose research is relevant to radio astronomy science or engineering.

6.2. The nature of expenses that may be paid for with a RAAP grant are:

- Flights
- Accommodation (at the NRF authorised level)
- Ground transport
- Catering
- Venue
- Equipment / resources (the RAAP grant may not be used to purchase capital items, other than resources required for the workshop)

6.3. As per National Treasury's instruction, the grant may not be used to pay for alcohol.

6.4. All procurement for a workshop paid for with RAAP funds must adhere to SARAO's financial and SCM policies and procedures.

6.5. SARAO HCD will provide some administration and logistical support for RAAP-funded workshops, but it is expected that the grant recipient will take on the majority of the work of arranging the workshop.

6.6. Copies of all receipts and other proof of expenses, for the workshop, must be retained and submitted to SARAO HCD, together with a brief expenditure report, no later than thirty (30) days after the workshop has taken place.

6.7. A brief workshop report, summarizing the benefits and outputs of the workshop, expected future research and collaborations, together with copies of the workshop programme and a list of delegates, must be submitted to the SARAO HCD no later than thirty (30) days after the workshop.

7. **How to apply for a RAAP Grant for 2019**

7.1. Consult with both the Chief Scientist and Chief Technologist on the topic and content of the proposed workshop to ensure that the workshop is relevant to the scarce skills development needs of SARAO.

7.2. Applications from SARAO staff must be submitted to HCD c/o jrodgers@ska.ac.za before the closing date, which is **31 January 2019.**

7.3. No late or incomplete applications will be considered.

7.4. The outcome of the application process will be communicated to all applicants by 12 March 2019.

7.5. All information provided for each proposal must be submitted as **ONE PDF document** (there is no application form).

7.6. Applications must include the information listed in **points a to k** below (please provide the information in the order requested).

   a. Contact person (title and full name)

   b. Contact details (email address and telephone number)

   c. Workshop title

   d. Proposed date / month, and duration, of the workshop

   e. Workshop organising committee details (names, contact details and affiliations)

   f. One paragraph overview summarizing the proposed workshop

   g. List the workshop objectives, including the benefits to the workshop participants, and skills output.

   h. Proposed number, and composition of delegates.

   i. Proposed workshop programme (a high-level programme is sufficient)

   j. Proposed venue (including a short motivation for why the venue was selected)

   k. Budget (to a maximum of four hundred and fifty thousand rand - R 450,000 - per workshop). If workshop is co-funded, please provide budget items funded through additional funding sources.