INTRODUCTION

This recruitment procedure is open until July 31, 2020.

The Board of Directors of the Association for the Development of the Atlantic International Research Centre (hereinafter AD AIR Centre) decided to open this international recruitment procedure for one researcher with a doctorate in the scientific area of Astronomy and Space Sciences, in the form of an undefined term employment contract to carry out studies, research and scientific development activities in the area of Radioastronomy and/or Space Situational Awareness (SSA).

Characterization of the activities

The contract envisages the promotion of R&D activities and scientific culture at Associação RAEGE Açores (A-RAEGE-Az hereafter) in Santa Maria island, that are relevant to the Atlantic Interactions agenda pursued by the AD AIR Centre, namely in enabling key space applications and data science tools and addressing cross-cutting activities such as technology transfer. The Space related activities, to be developed within the scope of the activity plan and the AD AIR Centre and A-RAEGE-Az, will benefit from existing and planned infrastructures in the Azores and in close collaboration with partner institutions/infrastructures.

Capitalizing on the location’s observation potential, these activities are also expected to contribute to:

(i) the consolidation of an operational atmosphere-ocean interactions monitoring network/platform;
(ii) the establishment of a surveillance platform/network to leverage scientific leadership in the Atlantic;
(iii) contribute to EU initiatives such as the Space Situational Awareness, for the benefit of Europe and the Atlantic region;
(iv) promote the development of research projects in this scientific area, in particular the Autonomous Region of the Azores;
(v) promote the internationalization of the research conducted by the scientific team based on the island of Santa Maria, with the respective scientific networks, and
(vi) promote the financing of projects that may be developed in the respective scientific areas.
(vii) The scientific content of the activity plan will be discussed and agreed between the candidate and the scientific council.

The present notice is open under the FCT program contract to support the development of activities of the AD AIR Centre and its connection with the A-RAEGE-Az: Atlantic Network of Geodynamic and Space Stations as a scientific facility.
This notice has been approved by the recruitment Jury.

I. Admission Requirements:

1. Academic Qualifications
   National, foreign and stateless doctorates who hold a doctoral degree in the general area of Astronomy, Physics, Computer Engineering or equivalent and holders of a scientific and professional curriculum that reveals an adequate profile to the activities to develop can apply to this position. The position is meritorious for future research duties within academia as well as industry/the public sector.

2. Specific Requirements
   Candidates are expected to have research skills in Space Physics and/or Radioastronomy with strong emphasis on data reduction. Previous experience in astronomical VLBI, single dish data reduction (spectral and continuum), interferometric/VLBI data reduction, space debris monitoring, space weather, or Sun-Earth interactions will be valued. Software development ability to cover the data pipeline will be valued. Flexibility to travel and exchange with foreign institutes is important.

II. Legislation:

1. The legislation applicable to the current recruitment process and to the employment contract is the Decree Law n.º 57/2016, August 29, in its current wording, and the Portuguese Labour Code approved by Law n.º 7/2009 of February 12, in its current wording (both can be found in www.dre.pt).

III. Work Place:

1. The work will be based at the RAEGE facilities in Santa Maria. Regular visits to the facilities in Flores are expected whenever the project justifies it.

IV. Contract Duration

1. The employment contract will be on a full-time basis, an undefined term employment contract, under the terms of b) of no. 1 of article 6 of the RJEC, ex vi, no. 2 of article 18º of RJEC, for a likely period of 36 months, including a trial period of 90 days, which is equivalent to the execution of the determined, defined and non-lasting service, that is, for the duration of the functions to be performed. Expected to begin on 1st October 2020.

V. Remuneration:

1. The gross monthly remuneration to be attributed is that provided for in article 15, paragraph 1, point a and b) (Level 1 and 2) of the RJEC, at a level corresponding to the level of remuneration 44 of the Single Remuneratory Table (TRU) (2.694,75€), and the respective vacation, Christmas and meal allowances, which are subject to taxes and other discounts determined according to the applicable legal rules.
VI. Jury

1. The jury for the evaluation process, approved by the Executive Committee of the Board of Directors of AD AIR Centre on 8th June 2020 is, in conformity with article 13º of the RJEC, composed by:
   i. President: Miguel Belló Mora, CEO of the AD AIR Centre;
   ii. Effective Member: Domingos da Silva Barbosa, Senior Researcher at Instituto de Telecomunicações
   iii. Effective Member: Dalmiro Jorge Filipe Maia, Assistant Professor, Faculdade de Ciências da Universidade do Porto
   iv. Substitute Member: Francisco Luís Wallenstein Faria e Maia de Macedo, President of the Board of A-RAEGE-Az

VII. Formalization and deadline application:

1. The deadline for applications begins on the publication day of this notice and runs until 31.07.2020, 18:00h GMT.
2. Application must be submitted with the following attached documents:
   i. Motivation Letter;
   ii. Detailed Curriculum Vitae;
   iii. Academic qualification certificates. If the degree has been awarded by a foreign higher education institution, it must be recognized by a Portuguese higher education institution, under the terms of Decree-Law No. 66/2018, published in the Diário da República, 1st series, n. 157, of August 16th, 2018, and any formalities established there must be completed by effective date of the contract;
   iv. Professional experience certificates (when applicable);
   v. Letters of recommendation (optional, maximum two);
3. All relevant documentation and requirements must be submitted in one single document and is mandatory to be submitted electronically, in PDF format (according to the following nomenclature: Name-LastName_Radioastronomy2020), to the email address recruitment@aircentre.org until the deadline / time for application submissions mentioned in this notice, indicating in the subject line “RAEGE Açores / RADIOASTRONOMY Project”.
4. False statements made by candidates will be punished according to the law.

VIII. Admission and Exclusion:

1. Applicants who incompletely or incorrectly formalize their application or who do not prove the admission requirements mentioned in this notice will be excluded from the evaluation process. In case of doubt, the jury may request proof of elements of the CV to the candidates.
2. The list of excluded candidates will be notified, by email, for the purpose of holding a hearing to the interested parties.
3. After the deadline for exercising the right to be heard by the interested parties, the jury appreciates all allegations. If the exclusion decision is kept, excluded candidates are notified by
email with receipt of notification delivery. The jury then initiated the application of the selection criteria for admitted candidates.

IX. Evaluation:

1. Under the terms of article 5 of the RJEC, the selection of admitted candidates is carried out through the evaluation of their scientific and curricular path in the last 5 years.

2. Minutes are elaborated of the jury meetings, which shall include a summary of the discussions, as well as the votes cast by each one of the members and the respective reasoning.

3. The scientific/professional path of the candidates (SPP) shall be scored following the below evaluation criteria:
   I. Scientific and/or technological production;
   II. Applied or practice-based research activities;
   III. Knowledge communication and dissemination;
   IV. Science, technology and/or innovation program management;
   V. Motivation Letter;
   VI. Recommendation Letters;

4. Scoring in the evaluation criteria is expressed in a numerical scale of 0 to 5 values, where 5 = Most appropriate and 0 = Least.

5. The following requirements are also considered for the position with the respective weights:
   I. Academic Qualifications (AQ)
      a) PhD in a field directly relating to Astronomy or Space Physics - 5 points
      b) PhD in another field - 1 point
   II. Specific Requirements (SR):
      c) Research skills in Space Physics and/or Radioastronomy with emphasis on data reduction - 1 point
      d) Proven experience in any of the following: Space Debris monitoring, Space Weather Science, Solar Physics - 1 point
      e) Proven experience with any of the following: Astronomical VLBI, single dish data reduction (spectral and continuum), Interferometric /VLBI data reduction - 1 point
      f) Proven Experience with operation and execution of Radioastronomical single dish and VLBI observation sessions and programs - 1 point
      g) Proven Experience in measuring very accurate annual parallaxes and proper motions of Galactic radio-sources and proper motions of extragalactic radio-sources, including other strong target sources like pulsars, stars with radio continuum emission, and astrophysical masers - 1 point
      h) Software development ability, with proven experience in at least one of the following programming languages: C++, Python, Matlab; IDL - 1 point

6. Each jury member shall provide a score for SPP, AQ and SR for each candidate. The final score (FS) of each candidate will be calculated as the arithmetic average of the scores attributed by all members of the jury, as follows:

\[ FS = \frac{\sum_{i=1}^{3} SPP_i + AQ_i + SR_i}{3}, \text{ where } i = \text{jury member} \]
7. The 5-year period referred previously may be extended by the jury, at the request of the candidate, when based on suspension of scientific activity for socially protected reasons, namely, for reasons of parental leave, prolonged serious illness, and other legally protected situations of unavailability for work.
8. The position can only be awarded to candidates whose final classification is equal to or higher than a score of 4.5.
9. Candidates with an absolute merit score lower than the one specified in the previous bullet-point are immediately excluded.
10. Candidates with the three highest scores will be invited for an interview.
11. The interview will be scored on a scale of values not exceeding 10% of the maximum final score, aiming at obtaining clarifications and explanations about the curricular elements and additional information, as well as assessing the candidate’s profile and motivation, and their knowledge of the project area to be developed. The interview may take place via a videoconference platform.
12. Candidates who miss the interview will be excluded from the procedure.

X. Deliberation of the Jury

1. The Jury’s deliberations are taken by nominal voting according to the selection criteria adopted and disclosed, with no abstentions.
2. After completing the evaluation procedure, the jury elaborates an ordered list of approved candidates with the respective classification according to the arithmetic average of the evaluation criteria mentioned in this notice.
3. All candidates are notified with the ordered list of candidates, and its respective, by email with receipt of notification delivery. Candidates can object on the jury’s decision within 10 days after being notified, for the purposes of carrying out a hearing to interested parties.
4. Within 30 days, from the deadline for the submission of applications, the jury's final decisions are communicated.
5. The jury's final decision is ratified by the AD AIR Centre Executive Board.
6. The present open call is exclusively for the advertised position and closes with its occupation.

XI. Policy for non-discrimination and equality of access:

1. AD AIR Centre actively promotes a non-discrimination and equal access policy, so that no candidate (he or she) can be privileged, benefited, harmed or deprived of any right or exemption from any duty due, in particular, age, sex, sexual orientation, marital status, family status, economic situation, education, social origin or condition, genetic heritage, reduced working capacity, disability, chronic illness, nationality, ethnic origin or race, territory of origin, language, religion, political or ideological convictions, and trade union membership.
2. Under the terms of D.L. No. 29/2001, of February 3, the candidate with disability has a preference in equal classification, which prevails over any other legal preference. Candidates must declare their respective degree of disability, the type of disability and the means of communication / expression to be used in the selection process, under the terms of the aforementioned diploma, on the application form.