

Call for tender

Open Call for PhD Research Fellowships - scientific area Astronomy/Astrophysics

The **Instituto de Astrofísica e Ciências do Espaço** (IA) R&D Unit managed by FCIências.ID – Associação para a Investigação e Desenvolvimento de Ciências, opens a call for the awarding of 1 (one) research fellowship(s), hereinafter designated by PhD Research Fellowships, in the scientific area of **Astronomy and Astrophysics**, under the Research Fellowship Regulation (*Regulamento de Bolsas de Investigação da FCT - RBI*) and the Research Fellowship Holder Statute (*Estatuto do Bolseiro de Investigação - EBI*).

The fellowship(s) will be financed by *Fundação para a Ciência e Tecnologia (FCT)* under the Collaboration Protocol for Financing the Multiannual Research Fellowship Plan for Doctoral Students, signed between FCT and Instituto de Astrofísica e Ciências do Espaço (IA) UIDP/04434/2020.

1. APPLICATION SUBMISSION

The call is open from September, 6th to 17 h00 (Lisbon time), October 3rd, 2022.

The applications, and all the supporting documents described in this Call for tender must be submitted, mandatorily, through the form available at the internet address www.iastro.pt/jobs/IA2022-14-BID.

Each applicant may submit only one application, under penalty of cancellation of all submitted applications.

Applicants providing false declarations or committing acts of plagiarism will be excluded from the application without prejudice of taking other corrective and punitive disciplinary measures.

2. TYPE AND DURATION OF FELLOWSHIPS

Aiming to support advanced training, PhD Research Fellowships will be granted to applicants that fulfil the requirements to join a study cycle that allows to obtain a PhD degree and that wish to develop research work that allows obtaining that degree.

The research activities leading to the attainment of the PhD degree will take place in the Instituto de Astrofísica e Ciências do Espaço, which will be the host institution of the fellowship holder, without prejudice the work can be carried out in collaboration with more than one institution.

The research activities leading to the attainment of the PhD degree must be integrated in the activities plan and strategy of the Instituto de Astrofísica e Ciências do Espaço, and should be developed under the following Doctoral Programs:

- PhD Program in Astronomy at the University of Porto (Programa de Doutoramento em Astronomia da Universidade do Porto)
- PhD Program in Astronomy and Astrophysics at the University of Lisbon (Programa de Doutoramento em

Astronomia e Astrofísica da Universidade de Lisboa)

- PhD Program in Physics – Study Plan Astrophysics at the University of Coimbra (Programa de Doutoramento em Física – Plano Estudos Astrofísica da Universidade de Coimbra)

The work plan may be developed entirely or partially in a national institution (fellowship in Portugal or both in Portugal and abroad, respectively).

The duration of the fellowships is, as a rule, annual, renewable up to the maximum of four years (48 months) and cannot be granted for a period less than 3 consecutive months.

In the case of a fellowship carried out both in Portugal and abroad, the work plan period in a foreign institution cannot exceed 24 months.

3. RECIPIENTS

PhD fellowships are aimed to applicants enrolled or that comply with the requirements to enroll in one of the Doctoral Programmes indicated in point 2 of this call and who wish to carry out research towards the attainment of the Doctor degree at the Instituto de Astrofísica e Ciências do Espaço, or in host institutions associated with it.

4. ADMISSIBILITY

4.1 Applicants' Admissibility Requirements

The following citizens may apply to this call:

- National citizens or citizens of other member states of the European Union;
- Third-country citizens;
- Stateless individuals;
- Citizens holding a political refugee status.

To apply for the PhD Research Fellowship, it is necessary:

- To hold a Degree or Master's degree in the area of Astronomy, Physics or in areas considered to be related;
- To be a citizen permanently and usually living in Portugal at the start date of the work plan abroad in case the work plan associated to the fellowship proceeds, entirely or partially, in foreign institutions (in case of both in Portugal and abroad fellowships); this requirement is applicable to both national and foreign citizens.
- Not to have benefited from a PhD or a PhD in industry fellowship directly funded by FCT, regardless of its duration.

- Not to hold a PhD degree.

4.2 Application's Admissibility Requirements

It is mandatory, under penalty of non-admissibility to the Call, to enclose the following documents to the application:

- Elements of identity card/citizen card/passport;
- Applicant's *Curriculum vitae* (CV) (up to 5 pages) with information relevant to the evaluation criteria;
- Certificates of academic degrees held by the applicant, compulsorily specifying the final classification and, if possible, the classifications obtained in all subjects taken, or, in alternative, applicant's declaration of honor, confirming that the bachelor's or master's degree was completed by the end of the application deadline;
- Record of recognition of academic degrees awarded by foreign higher education institutions and record of the conversion of the respective final classification to the Portuguese classification scale, or, alternatively, the applicant's declaration of honor that he obtained recognition of the foreign degree equivalent to that of graduate or master by the end of the application period;
- Motivation letter, indicating the candidate's motivation, research interests and expectations;
- Recommendation letter (2), it is recommended that they be sent, preferably by their authors and not by candidates, to the email address: jobs@iastro.pt, indicating in the subject the reference of this Opening of Tender and the name of the candidate;
- To present/prepare and submit the application and all related documents, including motivation and recommendation letters, in Portuguese or in English.

Regarding the above-mentioned admissibility requirements, the following should be noted:

- In the case of academic degrees awarded by foreign higher education institutions, and in order to ensure the application of the principle of equal treatment to applicants holding foreign and national academic degrees, it is mandatory to recognize these degrees and convert the respective final classification for the Portuguese rating scale.
- The recognition of foreign academic degrees and diplomas, as well as the conversion of the final classification to the Portuguese classification scale can be requested at any public higher education institution, or at the Directorate-General for Higher Education (DGES, only in the case of automatic recognition). Regarding this matter, it is suggested to consult the DGES portal at the following address: <http://www.dges.gov.pt>.
- Only applicants who have completed the cycle of studies leading to a Bachelor's or Master's degree by the end of the application period will be admitted. If they do not yet have a certificate of course completion, a declaration of honor from the applicants that they have completed the necessary qualifications for the purposes of the competition will be accepted by the end of the application deadline. The granting of the fellowship is always dependent on the presentation of proof of ownership of the

academic qualifications necessary for granting the fellowship.

5. WORK PLANS AND SCIENTIFIC ORIENTATION OF THE FELLOWSHIPS

The choice of the work plan by the approved candidates will be made from a list of proposals validated by IA and aligned with the scientific priorities of the IA (<http://iastro.pt/research/index.html>). Proposed work plans will be made available to successful candidates.

This call for proposals covers the area of Astronomy and Astrophysics, and the work plan will be included in one of the research groups of the IA, namely:

- [Towards the detection and characterization of other Earths;](#)
- [Towards a comprehensive study of stars;](#)
- [The assembly history of galaxies resolved in space and time;](#)
- [Unveiling the dynamics of the Universe;](#)
- [Astronomical Instrumentation and Systems.](#)

All fellows will be integrated into the research programs of the IA teams. The IA will also organize training schools and regular meetings, and provide support for students to participate in international meetings and visits to other partner institutes and organizations. For mixed scholarships (with mobility of up to two years), the fellow will spend periods in other institutions under the contract for joint supervision and double degrees (if relevant). Joint supervisions can be organized with ESO, ESA or other research institutes and organizations in the European Union or elsewhere.

6. EVALUATION CRITERIA

The evaluation considers the applicant's merit.

Applications considered admissible will be scored on a scale from zero (minimum) to 20 (maximum) on each of the following evaluation criteria:

- Criterion A - candidate's curriculum evaluation, with a weight of 60%;
 - Subcriterion A1 - previous academic training, including the result and content of curricular units completed and the relevance of this training to the scientific area of this scholarship, with a weight of 25%; candidates who do not hold a master's degree will have a maximum valuation of 19 in this criterion.

- Subcriterion A2 - complementary training, participation in exchange / mobility programs and other curricular activities, with a weight of 25%;
- Subcriterion A3 - letters of reference and other relevant elements, with a weight of 10%.
- Criterion B – motivation and skills demonstrated to carry out a PhD program, with a weight of 40%: (1) cover letter and research included in the academic curriculum, namely undergraduate projects, dissertations and internships; (2) participation in research activities, including meetings, internships, participation in research teams, experience in computational research, astronomical observation or in instrumentation development, etc; (3) scientific results, with the identification of the candidate's contribution, including publications in specialized magazines and proceedings, oral or poster communications, reports, and other relevant items. The evaluation of the candidates' research experience and scientific results will take into consideration the number of years elapsed since the completion of their last degree.

For the purpose of the decision on granting fellowships, applicants will be ranked according to the weighted average of the classification obtained in each of the 2 criteria, translated by the following

$$\text{Curricular and scientific classification (C)} = (0,6 \times A) + (0,4 \times B)$$

- Criterion E - The evaluation will include an interview (30%), for candidates in the first 5 places on the list ordered by curricular and scientific classification. This interview will aim to complement and confirm the information provided in criterions A and B, and also to validate the candidate's communication and social interaction, as well as his command of the English language.

$$\text{Final classification (FC)} = (0,7 \times C) + (0,3 \times E)$$

For tie-breaking purposes, the ranking of applicants will be based on the scores assigned to each of the evaluation criteria in the following order: criterion A, criterion B.

Important notice for applicants with degrees issued by foreign higher education institutions:

- Applicants with diplomas issued by foreign higher education institutions can apply and will be evaluated with the same criteria as applicants with diplomas issued by Portuguese institutions, provided that they present, in their application, proof of recognition of academic degrees and conversion of the final classification for the Portuguese classification scale in accordance with the applicable legislation.
- Applicants with foreign recognized diplomas who do not present proof of conversion of the final classification to the Portuguese classification scale will be evaluated with the minimum classification (10 points) in the criterion (A1).

- In any case, fellowship contracts with applicants with diplomas issued by foreign institutions will only be concluded upon presentation of proof of recognition of academic degrees and conversion of the final classification, as indicated above.

Applicants whose application is scored with a final classification of less than 14 points are not eligible for granting a fellowship.

7. EVALUATION

The applicants' evaluation panel is composed by the following elements:

- Francisco Lobo (IA/University of Lisbon, Faculty of Sciences; Chair)
- Tiago Barreiro (IA/ University Lusófona; Effective member)
- Alexandre Cabral (IA/University of Lisbon, Faculty of Sciences; Effective member)
- Tiago Campante (IA/ University of Porto; Effective member)
- Margarida Cunha (IA/ University of Porto; Effective member)
- Elisa Delgado Mena (IA/ University of Porto; Effective member)
- Israel Matute (IA/ University of Porto; Effective member)
- Teresa Barata (IA/University of Coimbra; alternate member)
- Jarle Brinchmann (IA/ University of Porto; alternate member)

The evaluation panel will assess the applications according to the evaluation criteria indicated in this Call, considering the elements of assessment.

All panel members, including the Chair, are committed to respect a set of responsibilities essential to the evaluation process, such as the duties of impartiality, the declaration of any potential conflict of interest situations and confidentiality. At all times during the evaluation process, confidentiality is fully protected and ensured in order to guarantee the independence of all opinions produced.

For each application, a final evaluation form will be produced by the panel where the arguments that led to the classifications attributed to each of the evaluation criteria and sub-criteria are presented in a clear, coherent and consistent way.

Meeting minutes will be produced from the evaluation panel meetings, under the responsibility of all its members.

The minutes and their attachments must include the following information:

- Name and affiliation of all evaluation panel members;
- Identification of all excluded applications and reasoning respective reasons;

- Methodology adopted by the panel for cases considered to be particular;
- Final Evaluation Sheets for each applicant;
- Provisional ranking list and seriation of applicants, in descending order of the final ranking, of all applications evaluated by the panel;
- Conflict of interest statements by all panel members;
- Possible delegations of vote and competences due to excused absence.

8. RESULTS DISCLOSURE

The evaluation results are communicated via email to the email address indicated by the applicant in the application.

9. TERMS AND PROCEDURES FOR PRIOR HEARING, CLAIM AND APPEAL

Once the provisional ranked list of the evaluation results has been communicated, applicants who have an unfavorable provisional decision may use their right to dispute it during the preliminary hearing phase, which takes place within 10 working days, according to Articles no. 121 and the following of the Administrative Procedure Code (CPA).

The final decision will be disclosed after the analysis of the applicants' arguments presented during the preliminary hearing. Final decision can be claimed within 15 working days or, alternatively, appealed within 30 working days, after the communication of the final results, respectively. Applicants who choose to submit a complaint must address their statement to the member of the Board of Directors of the FCT with delegated competence. Applicants who choose to present an appeal must address it to the FCT Board of Directors.

10. FELLOWSHIP GRANTING REQUIREMENTS

Research fellowship contracts are signed directly with the FCT.

The following documents are of mandatory submission, upon conditional granting of the studentship for purposes of contracting thereof:

- a) Copy of the civil, fiscal and, when applicable, social security identification document(s)¹;
- b) Copy of the academic degree certificates;
- c) Presentation of the registration of recognition of foreign academic degrees and conversion of the respective final

¹ The availability of these documents can be replaced, at the applicant's option, by presentation in person at the funding entity, which will keep the elements contained therein that are relevant to the validity and execution of the contract, including the civil, fiscal and security identification numbers and the validity of the respective documents.

classifications to the Portuguese classification scale, if applicable;

- d) Work Plan
- e) Document proving the acceptance and registration in one of the Doctoral Programs identified in this call;
- f) Supervisor(s) statement declaring to coordinate the work plan, as established in Article no. 5-A of the Statute for Research Fellowships (template will be made available by FCT);
- g) Institutional document supporting the applicant, issued by the institution(s) where the work plan will be carried out, guaranteeing the necessary conditions to its successful development, as well as the fulfilment of the duties established in Article no. 13 of the Research Fellowship Holder Statute (template will be made available by FCT);
- h) Updated document proving the exclusivity dedication regime (template will be made available by FCT).

The granting of the fellowship is still dependent on:

- The fulfilment of all the requirements listed in this Opening Call;
- the results of scientific evaluation;
- the absence of unjustified non-compliance with the fellowship holder during previous s directly or indirectly FCT funded fellowships;
- FCT available budget.

The lack of any of the necessary documents to complete the contracting procedure implies the expiration of the fellowship granting and conclusion of the process; applicants have up to 6 months after the disclosure of the provisional granting to present all of the listed documents.

11. FUNDING

Fellowship's payment will start after returning the signed contract to FCT, which should happen within the 15 working days after its delivery.

The fellowships awarded under this call will be financed by FCT using the State Budget fund and, whenever eligible, using the European Social Fund (ESF), under the PORTUGAL2020 Programme, in particular, under *Programa Operacional Regional do Norte (NORTE 2020)*, *Programa Operacional Regional do Centro (Centro 2020)* and *Programa Operacional Regional do Alentejo (Alentejo 2020)*, or any other funding schemes that might be approved, according to the respective requirements.

12. FELLOWSHIP COMPONENTS

A monthly maintenance allowance is granted to fellowship holders, in accordance with the table in Annex I of the RBI.

The fellowship may also include additional allowances, according to RBI's Article no. 18 and the values indicated in its Annex II.

All fellowship holders have a personal accident insurance related to the research activities, supported by the FCT.

All fellowship holders who are not beneficiaries of any social protection regime can use the right to social security through the voluntary social insurance regime, under the terms of the Contributory Scheme of the Social Security System. FCT will ensure the charges resulting from contributions under the terms and within the limits provided in Article 10 of the EBI.

13. PAYMENT OF THE FELLOWSHIP COMPONENTS

Payments due to the fellowship holder are made by bank transfer to the respective indicated account. The monthly maintenance allowance is paid on the first working day of each month.

Registration, enrolment or tuition fees components are paid directly by FCT to the national institution where the fellowship holder is enrolled in the PhD programme.

14. TERMS AND CONDITIONS of PhD FELLOWSHIP RENEWAL

The renewal of the fellowship always depends on the fellowship holder submission, within 60 working days prior to the renewal start date, of the following documents:

- a) declaration issued by the supervisor(s) and by the host institutions(s) attesting the work plan development and the evaluation of the respective activities;
- b) updated document proving compliance with the exclusive dedication regime;
- c) Declaration demonstrating the enrolment renewal in the study cycle leading to the PhD degree.

15. INFORMATION AND PUBLICITY OF THE GRANTED FUNDING

All the R&D activities carried out by the fellowship holder, directly or indirectly financed by the fellowship, namely communications, publications and scientific creations, as well as thesis, must include the reference to FCT and European Social Fund (ESF) financing. In particular, these references should mention the following operational programs: *Programa Operacional Regional do Norte (NORTE 2020)*, *Programa Operacional Regional do Centro (Centro 2020)* and *Programa Operacional Regional do Alentejo (Alentejo 2020)*, or additional funding schemes that might be approved. Insignia of FCT, MCTES, ESF and EU must therefore be included in the documents referring to these actions, according to the graphic rules of each operational program.

The disclosure of research results funded according to the RBI provisions must comply with the open access guidelines, publications and other research results in accordance with FCT rules. For all the fellowships, in

particular in case of European funded actions, namely the ESF, may be performed monitoring and controlling actions by national or European entities according to the applicable legislation.

Fellowship holders must therefore collaborate and provide all the required information, including answering to surveys and evaluation studies in this area, even though the fellowship might have already ceased.

16. NON-DISCRIMINATION AND EQUAL ACCESS POLICY

FCT promotes a policy of non-discrimination and equal access, thus no applicant may be privileged, benefited, damaged or deprived of any right or exempt from any duty. This includes ancestry, age, sex, sexual orientation, marital status, family situation, economic situation, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic disease, nationality, ethnicity or race, land of origin, language, religion, political or ideological beliefs or trade union affiliation.

17. APPLICABLE LEGISLATION AND REGULATIONS

The present Call is governed by this Opening Notice, the FCT Regulation of Research Fellowships, approved by the Regulation no. 950/2019, published in the Series II of the DR, of 16th of December 2019, by the Research Fellowship Holder Statute, approved by Law no. 40/2004, of 18th of August, in its current version, and by other applicable national and European legislation.