



**UNIVERSIDADE FEDERAL DO ESPÍRITO SANTO**  
**Centro de Ciências Exatas**  
**Programa de Pós-Graduação em Astrofísica, Cosmologia e Gravitação**  
**PPGCosmo**

**Call for Registration and Selection for a Ph.D. in Astrophysics, Cosmology and Gravitation - PPGCosmo**

CALL NUM. 01/2019

The Organizing Committee of the Postgraduate Program in Astrophysics, Cosmology and Gravitation (PPGCosmo), within the Centro de Ciências Exatas (CCE) at the Federal University of Espírito Santo (UFES), announces that the registration period for the Selection Process for the Doctorate Degree in “Astrophysics, Cosmology and Gravitation” for the semester starting in August 2019 is now open.

**I – Registration**

I.1. Period: from 25/03/2019 (00:00 h, Brasilia time) until 10/05/2019 (23:59 h, Brasilia time).

I.2. Procedure: by filling in and sending the application form available online at the website <http://ppgcosmo.cosmo-ufes.org/home.html> and <http://www.cosmologia.ufes.br/en>.

I.3. Documents required for registration:

- (a) Curriculum Vitae of the candidate.
- (b) Copy of the undergraduate degree and academic record with grades in the subjects taken.
- (c) Copy of the master’s degree and academic record with grades in the subjects taken (in the case that the candidate has either started or finished a master’s degree).
- (d) Two reference letters (in free style).
- (e) Statement of research interests. The length of this document must be a maximum of two pages written in free style, preferably in English, although it will also be accepted in Portuguese or Spanish. This document should consist of a list of research topics of interest, with an explanation of why they are relevant and how they relate to the candidate’s previous studies.

**II - Selection process**

II-1 The selection process will consist of 03 (three) stages:

- a) Analysis of the Curriculum Vitae and of the grades in the undergraduate subjects and, where applicable, also of the grades in the master’s subjects;
- b) Analysis of the statement of research interests;
- c) Interview.





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II-2. In each one of these stages the following items will be assessed:

(a) Curriculum Vitae and Academic Grades: performance in the undergraduate and, where applicable, master's subjects; participation at scientific events; publications in peer-reviewed scientific journals; completion of a master's degree.

(b) Statement of Research Interests: knowledge of the scientific activities carried out in the areas of this Ph.D. program; knowledge of the bibliography on the research topics; coherence of the presentation; writing skills; alignment with the research areas of PPGCosmo.

(c) Interview: knowledge of the topics presented; oral skills; coherence of the presentation; knowledge of the following subjects: classical mechanics, electromagnetism, quantum mechanics and statistical physics, at the level of an undergraduate degree in physics.

II-3. Each of these stages will be evaluated with a mark between 0 (zero) and 100 (one hundred). Item (b) will carry weight 1 (one) and items (a) and (c) will each carry weight 2 (two). The final mark will be a weighted average of these three marks with their corresponding weights.

II-4. Only the candidates that reach an average of at least 70 (seventy) in the marks in items II-2.a and II-2.b will be interviewed. This average is also obtained using the weights described in item II-3.

II-5. The results of the first stage of evaluation shall be published on 15/05/2019. The interview will be carried out during the period between 03/06/2019 and 07/06/2019, either in person or via a conference call, and will last for at most 1 (one) hour. The day and time of the interview will be decided by the selection committee for this call, based on the availability indicated by the candidate.

II-6 The candidate must indicate in the application form a ranked list of potential supervisors from within the team of permanent members of PPGCosmo, and a ranked list of potential co-supervisors from within the team of collaborators of PPGCosmo outside Brazil. The selection committee will try to meet the preferences of the qualified candidates based on: the candidate's final ranking in this selection process, the availability of student vacancies by both the supervisor and co-supervisor, and the acceptance by all parties - supervisor, co-supervisor and student. In the event of no agreement between all parties involved, the student will be eliminated from this selection process.

### **III - Student positions**

III-1 There is 01 (one) student position available via this selection process. In the event that not enough candidates meet the acceptance criteria, however, not all positions might be filled in.

III-2 Each permanent member of PPGCosmo, who is a potential supervisor, and each collaborating member, who is a potential co-supervisor, will be allowed to have, at the end of the se-





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lection process, at most 01 (one) new student under his/her supervision. This factor will be taken into account in the final allocation of supervisors/co-supervisors/students specified in item V-4.

#### **IV- Studentship allocation**

IV-1 PPGCosmo was created with the expectation that all students registered in this doctorate program will receive a Ph.D. studentship provided by a funding agency, such as CAPES, FAPES or another agency.

IV-2 The approval in this selection process does not guarantee the right of the student to receive a Ph.D. studentship.

IV-3 The available studentships will be distributed among the registered candidates respecting their ranking and the funding agencies' policies for the studentships. The distribution of the studentships will be carried out by the Studentship Commission, which is to be appointed by the PPGCosmo Council.

#### **V - Result of the Process and Resources**

V-1 The final result of the selection process will be announced on 14/06/2019 (before 18h, Brasilia time) by posting at both the secretary's office of CCE-UFES and on the registration website.

V-2 The candidates will be entitled to contest the result of the selection process by sending, within 24 hours of the announcement of the result, a request for reconsideration. This request should be sent to the selection committee at the email address [ppgcosmo@cosmo-ufes.org](mailto:ppgcosmo@cosmo-ufes.org) in the form of a written exposition of the reasons for contesting. The request for reconsideration will be analyzed and published by the selection committee within 1 (one) working day of reception. In the event that the request for reconsideration of the result is not accepted by the selection committee, the interested party will be entitled to appeal within 24 hours to the PPG-Cosmo Council, who will decide within 1 (one) working day on the propriety, or otherwise, of the request for reconsideration of the result.

Sole paragraph: with regards to the results in the first stage of the selection process, the Council will have to announce its decision no later than 17/05/2019. With regards to the final result, the Council will have to announce its decision no later than 21/06/2019.

V-3 The final result of the selection process will be approved by the PPGCosmo Council in a meeting to be held on 14/06/2019.

V-4 The selection committee that will undertake the process described in this Call will be formed by five members to be chosen among the permanent members of PPGCosmo.





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**VI - Final Provisions**

Instances unaccounted for by the regulations above will be ruled by the PPGCosmo Council.

**Permanent members of PPGCosmo:**

- 1) Davi Cabral Rodrigues (UFES, Brazil)
- 2) Felipe Tovar Falciano (CBPF, Brazil)
- 3) Hermano Velten (UFOP, Brazil)
- 4) Humberto Belich (UFES, Brazil)
- 5) Ilya Shapiro (UFJF, Brazil)
- 6) Júlio César Fabris (UFES, Brazil)
- 7) Marc Casals (CBPF, Brazil)
- 8) Martin Makler (CBPF, Brazil)
- 9) Nelson Pinto-Neto (CBPF, Brazil)
- 10) Oliver Piattella (UFES, Brazil)
- 11) Riccardo Sturani (UFRN, Brazil)
- 12) Saulo Carneiro (UFBA, Brazil)
- 13) Valerio Marra (UFES, Brazil)
- 14) William Hipolito Ricaldi (UFES, Brazil)

**Potential co-supervisors:**

- 1) David Wands (University of Portsmouth, United Kingdom)
- 2) José Antônio de Freitas Pacheco (Observatoire de la Côte d'Azur, France)
- 3) Luca Amendola (Universität Heidelberg, Germany)
- 4) Scott Dodelson (Carnegie Mellon University, United States)

