



## **Specific Admissions Process for the Doctoral Program in Physics, under the General Call for Applications PRPGP/UFSM No. 030/2025**

The Graduate Program in Physics (PPGFIS) at the Federal University of Santa Maria (UFSM) announces that applications are now being accepted for admission to the Academic Doctoral Program in Physics in 2026.

The program will be a regular on-campus program in the city of Santa Maria and will last 8 semesters.

### **1. INTRODUCTORY PROVISIONS**

- 1.1. It is the candidate's responsibility to be familiar with the rules set forth in this Specific Call and in the General Call to which it is linked (PRPGP/UFSM No. 030/2025).
- 1.2. This Specific Call follows the timetable of the General Call to which it is linked (PRPGP/UFSM No. 030/2025).
- 1.3. Changes to the Call through addenda, errata, and corrections, as well as the list of vacancies and the internal selection timetable, will be published as necessary on the webpage for Call No. 030/2025.
  - 1.3.1. Other announcements, such as preliminary results for each stage and a list of scores, will be posted on the program's official website <https://www.ufsm.br/cursos/pos-graduacao/santa-maria/pgfisica>.
  - 1.3.2. Questions can be addressed via email [pgfisica@ufsm.br](mailto:pgfisica@ufsm.br).

### **2. TARGET AUDIENCE**

- 2.1. Graduates with a bachelor's degree in physics or related fields, or those who have completed a graduate program in physics or related fields.

### **3. OPEN POSITIONS AND SELECTION TIMETABLE**

- 3.1. The available spots for each admission window, as well as the selection timetable, will be announced in a supplementary document to be published on the webpage for Call No. 030/2025, in accordance with the timetable established in the General Call.



3.2. If a supplementary document (schedule) is not published in one of the admissions windows, this indicates that the program will not be offering spots in that round of the admissions process.

#### 4. APPLICATIONS

4.1. The PPGFIS offers the following research areas: Astronomy, Atmospheric Physics, Experimental Condensed Matter Physics, Nuclear and Elementary Particle Physics, Theoretical Condensed Matter, Statistical Mechanics and Complex Systems.

4.2. A list of faculty advisors is available on the Physics Graduate Program website at <https://www.ufsm.br/cursos/pos-graduacao/santa-maria/pgfisica>.

4.3. If a candidate submits more than one application, only the most recent application will be considered.

4.4. The PPGFIS will offer affirmative action spots, in accordance with [UFSM Resolution No. 068/2021](#), which establishes the Policy on Affirmative Action and Inclusion in Graduate Programs.

4.5. **DOCUMENTATION:** At the time of application, the candidate must upload the following documents:

4.5.1. Photo ID:

4.5.1.1. For Brazilians and foreign nationals residing in Brazil: a photo ID containing a CPF number (e.g., ID card, driver's license, passport, etc.). If the attached ID does not include the CPF number, the applicant must also attach a copy of the CPF document. If accepted, the CPF number is used to access the place confirmation system.

4.5.1.2. For foreigners without a CPF: passport. If accepted, the passport number is required at the time of place confirmation.

4.5.2. Document proving the minimum required degree, for Brazilians and foreigners:

4.5.2.1. Proof of Undergraduate degree:

- a) Undergraduate or higher education diploma (front and back); OR
- b) Master's or doctoral diploma (front and back); OR
- c) Certificate of Degree Program Completion issued by the responsible department of each higher education institution; OR
- d) Course Completion Statement issued by the Program containing the information specified in the template available in General Call No. 030/2025; OR



- e) Certificate of Expected Graduation, issued by the Office of the respective Program. NOTE: The Certificate of Expected Graduation will only be accepted for participation in the selection process, and the candidate must submit the Diploma, Certificate, or Declaration of Course Completion in compliance with the date specified in the General Call timetable.

4.5.2.2. Proof of Master's degree:

- a) Master's degree diploma (front and back); OR
- b) Certificate of Degree Program Completion issued by the responsible department of each higher education institution; OR
- c) Minutes of the thesis defense indicating a passing grade; OR
- d) Course Completion Statement issued by the Program, indicating the expected date of the thesis defense. NOTE: The course completion statement will only be accepted for participation in the selection process, and the candidate must submit the Diploma, Certificate or minutes of the defense in compliance with the date specified in the General Call timetable.

4.5.3. Documents for candidate evaluation:

- 4.5.3.1. Undergraduate program transcript, if applicable;
  - 4.5.3.2. Master's program transcript, if applicable;
  - 4.5.3.3. Documented Lattes Curriculum (or equivalent) for the last five years (with copies of the documents cited in the curriculum).
  - 4.5.3.4. Doctoral research proposal and descriptive report of the candidate's scientific activities (with a total length of no more than eight (8) pages).
  - 4.5.3.5. Failure to submit any evaluation documents will result in a score of zero being assigned to the candidate in the stages where the document is used.
  - 4.5.3.6. The evaluation form included in ANNEX 1 of this Call, duly completed, covering the last five years plus the year in which the application is submitted.
  - 4.5.3.7. Supporting documents related to the items listed on the evaluation form.
  - 4.5.3.8. Pursuant to Resolution No. 064/2021, the period of analysis of the Lattes Curriculum for women who have had or adopted children will be extended by 2 years beyond the standard period.
- 4.5.4. Failure to submit any documents will result in the rejection of the candidate's application.

## 5. SELECTION CRITERIA

5.1. The selection process will be conducted in three stages: (i) review of curriculum vitae (CV) and academic transcripts; (ii) review of the doctoral research proposal and descriptive report; and (iii) defense of the doctoral research proposal and descriptive report, to be conducted in person or via Google Meet at the discretion of the Selection Committee.



5.2. Review of the CV and graduate academic transcripts (where applicable) accounts for 7.00 (seven) points of the candidate's final score. For the CV review, the criteria listed in ANNEX 2 of this specific Call will be considered;

5.2.1 The scores for this stage will be normalized (scaled) based on the highest score obtained by any of the candidates.

5.3. The deadline for the release of scores from the first evaluation stage (review of CV and academic transcripts) and the period for requesting reconsideration will be indicated in the timetable.

5.4. The analysis of the preliminary project and descriptive report, with a weight of 1.5, will consist of the evaluation of the preliminary doctoral research project and the scientific activities carried out by the candidate. The preliminary project and descriptive report must be submitted at the time of registration, and the evaluation will follow the criteria set forth in ANNEX 2 of this specific Call for applications.

5.5. The defense of the preliminary research proposal and descriptive report will carry a weight of 1.5 and will be conducted either in person or via Google Meet, at the discretion of the Selection Committee. The schedule of defenses, as well as connectivity tests (when applicable), will be posted on the PPGFIS website, in accordance with the timetable provided in each admissions window. If the defense is held remotely via Google Meet, the access link will be sent by email, and the candidate should confirm receipt.

5.6. The Selection Committee will not be held responsible for connectivity issues on the candidate's end during the defense of the research project and descriptive report.

5.7. The candidate will have a maximum of 10 minutes to present the research project and descriptive report. The Selection Committee will interrupt the presentation at the end of the 10 minutes.

5.8. The Selection Committee may question the candidate for up to 20 minutes. During the questioning, the candidate will be asked about relevant aspects of their research proposal and their academic and/or professional career (in accordance with ANNEXES 1 and 2 of this specific Call), such as: time taken to complete their undergraduate/master's degree; specific field of study for their undergraduate/master's degree, the feasibility of their preliminary project, and the specific knowledge required for the development of the project.

5.9. If the candidate does not appear in person, or does not join the online session if the defense is conducted via Google Meet, within five minutes of the time specified in the timetable for the start of the interview, they will be considered absent, and a score of zero will be assigned for that stage of the selection process.

## **6. SCORING**

6.1. For the classification of candidates, weights will be applied to the scores obtained in the (i) review of CV and academic transcript; (ii) analysis of the research proposal and descriptive report; and (iii) defense of the research proposal and descriptive report.



- 6.2. Candidates who receive a score lower than 4.50 in stages (i) and (ii) will be disqualified and will not proceed to stage (iii).
- 6.3. Candidates will be ranked according to their overall score, from highest (first place) to lowest, including all candidates with an overall score of 6.00 or higher.
- 6.4. In the event of a tie in the final score of the selection process, the tiebreaker will be determined in order of priority by the following criteria:
  - 6.4.1. Highest score on the preliminary project defense;
  - 6.4.2. Highest score on the CV review;
  - 6.4.3. The oldest candidate will be given priority.

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Ministry of Education  
Universidade Federal de Santa Maria  
Master's Program in Physics

UNIVERSIDADE FEDERAL DE SANTA MARIA  
DOCTORAL PROGRAM IN PHYSICS

**APPENDIX 1**

**EVALUATION FORM**

1.a Articles published or accepted for publication in indexed journals with an impact factor (limited to 2 articles):
Article 1 - Article title and DOI
Article 2 - Article title and DOI
1.b Article published or accepted for publication in journals without an impact factor (limited to 2 articles):
Article 1 - Article title and DOI
Article 2 - Article title and DOI
1.c Paper published at an international conference (limited to 2 papers):
Paper 1 - Paper title
Paper 2 - Paper title
1.d Publication of an abstract or paper presentation at an international conference (limited to 3 papers):
Paper 1 - Paper title
Paper 2 - Paper title
Paper 3 - Paper title
1.e Publication of full paper, paper abstract, or presentation at a national conference (limited to 3



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papers):
Paper 1 - Paper title
Paper 2 - Paper title
Paper 3 - Paper title
1.f Participation in conferences and workshops (limited to 3 participations):
Event 1 - Name of event
Event 2 - Name of event
Event 3 - Name of event



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**APPENDIX 2**

**CRITERIA FOR CURRICULUM VITAE ANALYSIS**

**I. CRITERIA FOR CURRICULUM ANALYSIS (WEIGHT 7.00)**

1. The curriculum review will follow two criteria: Academic Performance (AP) and Scientific Output (SO);

2. The score for each of these items will be determined by:

**A. Academic Performance (AP)**

Academic performance will be evaluated according to the following rule: **APS (Academic Performance Score)** = arithmetic mean of the two best grades or scores in core courses taken in the PPGFIS or in another graduate program recognized by CAPES. If the candidate has completed a master's degree in a related field and their transcript does not include courses equivalent to the PPGFIS core courses, the two highest grades from the core courses of the completed program will be considered, applying a multiplier of 0.70.

**A1.** If grades are listed on the transcript for passed courses, the following scale will be used: A=10.00; A- = 9.00; B=8.00; B-=7.00; C=6.00.

**A2.** The candidate who obtains the highest APS value (APSmax) will receive a score for academic performance equal to ten, **APS = 10.00**, and the remaining scores assigned under the academic performance criterion will be calculated as:  $AP = 10 \times [APS/(APSmax)]$ .

**A3.** For applicants who do not hold a master's degree and are not enrolled in a master's program, the academic performance score may be calculated in one of the following ways: (i) Using the academic transcript. In this case, the APS will be calculated as the average of grades in theoretical physics courses, using the curriculum of the Bachelor's program in Physics at UFSM as a reference, or similar courses when the student has completed the program at another institution or when they come from a related field of study. If the candidate is currently enrolled in one of the evaluated courses, it will not be considered in the calculation of the average. Courses not listed on the candidate's transcript receive a grade of zero. (ii)



Using the score from the Brazilian Unified Physics Exam (EUF). In this case, the score will be calculated as follows:  $APS = (N_{\text{euf}} \times 6.0) / M_{\text{euf}}$ , where  $N_{\text{euf}}$  is the score obtained by the candidate on the EUF and  $M_{\text{euf}}$  is the average of the scores of all candidates from the same edition of the EUF exam. The APS is capped at 10 points. If the candidate submits their academic transcript and proof of their EUF score, the higher APS obtained will be considered.

## **B. Scientific Output (SO)**

**B.1** Each item of scientific output will be assigned a value  $SO(k)$ , as follows:

**B.1.a** An article published or accepted for publication in an indexed journal with an impact factor (IF) will receive  $SO(k) = IF \times MF$ , limited to two articles. The IF will be obtained from the most recent JCR/Clarivate table.

**B.1.b** Article published or accepted for publication in a journal without an IF:  $SO(k) = 0.20 \times MF$ , limited to two articles.

**B.1.c** Paper published at an international conference:  $SO(k) = 0.30 \times MF$ , limited to two papers.

**B.1.d** Abstract of a paper presented at an international conference:  $SO(k) = 0.20 \times MF$ , limited to three papers.

**B.1.e** Full paper or abstract of a paper at a national conference:  $SO(k) = 0.20 \times MF$ , limited to three papers.

**B.1.f** Participation in conferences and workshops;  $SO(k) = 0.10$ , limited to three events.

**B.2** Each candidate will be assigned a Scientific Output score (SOS), given by the sum of the points obtained in item B.

**B.3** If there are at least three candidates, the candidate with the highest SOS value ( $SOS_{\text{max}}$ ) will receive a score for the scientific production criterion equal to ten,  $SO = 10.00$ , and the scores assigned to the remaining candidates for the scientific production criterion will be calculated as:  $SO = 10 \times [SOS / (SOS_{\text{max}})]$ . If the highest SOS value is greater than 5.00 or the number of candidates is less than three,  $SOS_{\text{max}}$  will be equal to 5.00.

3. The multiplicative factor MF is assigned based on the number of authors and the candidate's position of authorship:  $MF=1$  if the candidate is the first author of the article or is verifiably the lead author in cases where authors are listed in alphabetical order. Otherwise,  $MF = \frac{1}{\sqrt{NA}}$ , where NA is the total number of authors.

4. In the analysis of candidates' CVs, only the **last five years** will be considered, plus the year of this Call.



5. Pursuant to Resolution No. 064/2021, the review period for the CV of women who have given birth to or adopted children will be extended by two years beyond the standard period.
6. The final score (FS) assigned to the CV review will be calculated as:  $FS = (AP + SO)/2$ .
7. Candidates who failed or withdrew from a doctoral program, whether or not recognized by CAPES, will have their final score (FS) multiplied by 0.50.
8. Cases not covered herein will be reviewed by the PPGFIS Collegiate Body.

## II. CRITERIA FOR ANALYSIS OF THE PRELIMINARY RESEARCH PROJECT AND DESCRIPTIVE REPORT (Weight 1.5).

State of the art: 2.00;

Alignment with key PPGFIS research areas: 6.00;

Alignment of the candidate's profile with the intended research line: 2.00.

## III. CRITERIA FOR THE DEFENSE OF THE PRELIMINARY PROJECT AND DESCRIPTIVE REPORT (Weight 1.5).

Motivation for advanced studies: 2.00;

Mastery of tools and specific knowledge related to the research area: 6.00;

Consistency of responses: 2.00.