

# Call for PhD grants



2014-2015 edition of the MAP-fis



Doctoral Program

Announcement for PhD scholarships (3 years)

1. MAP-fis Doctoral Program announces 5 PhD grants for MAP-fis Students registered for the first time in 2013-2014.
2. The scholarships are annual, renewable twice, for a total duration of three years.
3. The selected applicants will sign a grant contract directly with FCT, IP. These contracts are drawn in accordance with the Regulation for Grants of FCT,IP and the Statute of FCT grants holder (Law 40/2004) available in the address <http://www.fct.pt/apoios/bolsas/regulamentos>. The grants are of the type BD (“Bolsa Doutoramento”).
4. Applicants must satisfy the requirements of article 30 of Law no. [74/2006](#), of March 24 as altered by Laws no. 107/2008, of June 25 and 230/2009, of September 14.
5. In addition, applicants must satisfy the following requirements;
  - a) To have registered in MAP-fis doctoral program for the first time in 2013-14.
  - b) To have obtained approval in the Curricular units of Advanced Physics Topics I and Essay, and thus be in a position to request registration in the Thesis Curricular Unit.

6. Applicants apply by providing the following documentation, in a closed envelope marked MAP-fis Grant Application, at the address:

**Departamento de Física e Astronomia**  
**Faculdade de Ciências da Universidade do Porto**  
**Rua do Campo Alegre, s/n**  
**4169-007 Porto**

The documents may also be sent in pdf format to [dfa.sec@fc.up.pt](mailto:dfa.sec@fc.up.pt)

- a) A declaration of application to a MAP-fis PhD grant;
- b) An updated CV of the applicant;
- c) A research plan for the duration of the PhD;
- d) A declaration from the indented supervisor (and co-supervisor, if such is the case) accepting the supervision of the student, and the proposed research plan;
- e) Curriculum Vitae of the indented supervisor (and co-supervisor if such is the case);
- f) A declaration from the research center where the PhD research is to take place, stating acceptance of the student, and capacity to provide the conditions required to carry out the proposed research.

The research plan should follow the following guidelines: a summary of no more than a 1000 characters, and a state-of-the-art summary and research plan, not exceeding 8000 characters overall, excluding references.

7. Applicants may also arrange for up to three letters of recommendation to be sent by e-mail to [dfa.sec@fc.up.pt](mailto:dfa.sec@fc.up.pt)

8. This call is open until January 12, 2015.

9. Candidates' application will be evaluated according to the criteria specified in the deliberation of the Scientific Council of July 17, 2014, and annexed to this announcement. A ranked list of applications, with indication of the selected ones, will be published in the Program's website <http://www.map.edu.pt/fis>, by January 26.

10. Unsuccessful candidates have 10 working days to make their case in a preliminary hearing, under the terms of The Code for Administrative Procedures (Código do Procedimento Administrativo). From the final decision they may appeal to the Scientific Committee within 15 working days of their notification.

11. These grants are financed by the Portuguese Government through the Ministry of Education and Science, and, when eligible, by the [European Social Fund](#) through the [Programa Operacional Potencial Humano](#) of [QREN](#) Portugal 2007-2013 in accordance with the regulations specific to intervention type 4.1.

12. For more information visit the MAP-fis website <http://www.map.edu.pt/fis/> or e-mail to [mapfis@map.edu.pt](mailto:mapfis@map.edu.pt).

## **Annex: Scientific Council Deliberation, July 17 2014**

Map-fis PhD scholarships are awarded in the second year of the program following criteria similar to those used in the National Call for PhD fellowships of FCT. Applicants must be first year MAP-fis students.

The evaluation follows the scheme detailed below:

Item	Maximum	Weight
Curriculum Vitae	5	50%
Thesis Plan	5	30%
Supervision conditions	5	20%

### ***CV evaluation***

From 0 to 5. In the evaluation of The CV the following elements will be considered;

- GP: grades prior to entry in MAP-fis; from 0 to 5, weight 50%.
- PF: performance in Performance in first year of MAP-fis, including consideration of grade of Advanced Physics Topics I and Essay; from 1 to 5, weight 30 %.
- PUB = Publications in peer-reviewed journals, participation in scientific events, especially with communication, participation in research projects, and any other elements deemed

relevant to judge the merit of the applicant; from 0 to 5 weight 20%.

GP, grades prior to entry into MAP-fis are calculated as in first application to MAP-fis:

$$GP = [(FG/20) * YS * AS * IT] * 5,$$

where:

- FG (Final grade of First degree and Master), converted to scale 0-20;
- YS (Years of study): 3/5 for a 3 year degree, 4/5 for a 4 years and 1 for full 5 years;
- of previous training;
- AS (Area of study): maximum 1 (value for Physics and Physical Engineering); awarded
- by panel, taking into consideration suitability for previous studies for a PhD in Physics.
- IT (Institution ): maximum of 1 (values for Portuguese universities). This factor is
- determined by the evaluation panel, using publicly available information on the

institution(s) of previous degrees;

### ***Thesis Plan***

From 0 to 5. The following questions will be considered in the evaluation by the panel:

1. Are the objectives and the means to achieve them clearly and coherently spelled out?
2. Is the state-of-the-art well researched, and the proposed plan relevant in the context of the current state of the art?
3. Is the plan feasible and realistic for the time frame of the PhD? Are the required resources in place? Are the methods proposed adequate to initiate the research?
4. Is the proposed research innovative, and likely to have significant impact if successful?

### ***Supervision Conditions***

From 0 to 5. All the research centers associated with MAP-fis are considered equivalent with respect to supervision conditions. In this item, the panel will consider the CV of the supervision team, their research experience, and their supervision track record, to gauge their ability to successfully train and counsel the student in the execution of the thesis plan. MAP-fis application to FCT funding already defined the conditions required of a supervisor (Section 3.2 of the application). These conditions are reproduced in following section.

### ***Criteria for supervision of PhD students: from section 3.2 of MAP-fis application.***

To qualify as supervisor a researcher must meet three types of criteria:

1. Scientific qualifications: he/she must show scientific activity carried out after his PhD that demonstrates autonomy and maturity.
2. Access to infrastructures: he/she must demonstrate that the PhD student will have access to the

space, equipment and infrastructures, required for any PhD project.

3. The proposed plan must be judged novel, relevant, and capable of sustaining an PhD project meeting high international standards, as measured, for instance by publication in international journals well recognized by the community.

The following guidelines will inform decisions on suitability as supervisor:

- a) PhD supervisors are expected to show significant research activity, in the last five years, as evidenced, first and foremost, by a regular publication record, in journals of good standing. One article in ISI journal per year is considered as a minimum guideline to regular publication activity, although smaller outputs will not be discarded without due consideration.
- b) Researchers are not encouraged to be main supervisors in the first three years after their own PhD, unless their scientific career, assessed in volume (number of publications, project participation) and quality (first authorship, project or task leadership, impact factor of journals, citations, invited talks, courses given), shows very high promise (several team members fall in this category). They are however encouraged to act as co-supervisor.
- c) Researchers with more than three years after their own PhD, are expected to act as PhD main supervisors, if they show independent scientific activity and autonomy, beyond that of their own degree: being PI's of research projects, publishing with different collaborators, supervising successful MSc thesis, having co-supervised PhD's, being invited speakers, are, among others, positive indications of autonomy and independence.
- d) For more senior researchers (beyond six years) beside the scientific activity, the track record of supervision becomes increasingly important. Failed, or unremarkable, examples of supervision may impact negatively on decisions concerning suitability to supervise.