Call for applications to the Doctoral scholarships of the Doctoral Programme in the Physics and Mathematics of Information (DP-PMI)

Scholarship Reference: DP-PMI Call 2017-18

Main research field: Physics and Mathematics of Information

Scholarship description: The Doctoral Programme in the Physics and Mathematics of Information (DP-PMI) takes place at Instituto Superior Técnico, University of Lisbon, in Portugal.

The Doctoral Programme in the Physics and Mathematics of Information (DP-PMI) was selected for funding by the Portuguese Foundation for Science and Technology (FCT, IP), having been awarded 10 Doctoral (four years long) scholarships per edition, for a total of 4 editions. The programme started in January 2014 and will recruit up to 40 students over the following four years.

The scholarships awarded under this call will be financed by the Portuguese Foundation for Science and Technology and the Ministry for Science, Technology and High Education (FCT/MCTES), and where eligible, by funds from the European Social Fund through the POCH (*Programa Operacional do Capital Humano*).

As stated in the rules for that competition, the DP-PMI Governing Board will handle the applications and the selection of the candidates to whom these scholarships will be awarded directly by FCT, IP.

Under the terms set in the <u>Research Fellowship Holder Statute</u> (Law 40/2004, of 18 August), and according to the <u>Regulations for Research Grants of FCT, IP</u>, the DP-PMI Governing Board opens a call for applications to scholarships for the DP-PMI 2017-18 edition. In this call, four scholarships are available (which can be mixed scholarships). The actual number of awarded scholarships may be less, depending on the overall merit of the candidates.

The duration of the scholarship is one year in length, renewable for up to a total of four years, and cannot be awarded for periods of less than three consecutive months.

The scholarships corresponding to this call are expected to start in February 2018.

The doctoral programme (in a total of 240 ECTS) will start with a curricular section followed by a doctoral thesis. Students must enroll in one of four accredited doctoral programs, Electrical and Computer Engineering, Information Security, Physics and Technological Physics Engineering (all at Instituto Superior Técnico).

Applicants: Doctoral scholarships are intended for individuals who meet the requirements set forth in Article 30, number 1, of Decree-Law 74/2006, of 24 March, amended by Decree-Law 115/2013, of 7 August, as amended by Decree-Law no. 107/2008 of June 25, 230/2009 of September 14 and e Decree-Law no. 63/2016 of September 13 and who wish to develop research work leading to a doctoral degree.

The following individuals may apply for scholarships directly or indirectly funded by FCT:

a) Portuguese citizens, or citizens of other European Union member states; b) Citizens of other countries who hold permanent residence permits in Portugal or who hold the status of long-term resident under the terms of Law 23/2007, of July 4, amended by Law No. 29/2012, of August 9; c) Citizens of countries with which Portugal has reciprocal agreements; d) Citizens of any other country, if available for an interview.

In the case of work plans partially carried out outside Portugal (mixed scholarships), applicants must have permanent residence in Portugal, and documental evidence to support the country of residence, residence permit or other legally equivalent document, must be submitted.

Academic background: To be admitted to the Doctoral Programme in the Physics and Mathematics of Information, the students must have a Masters degree in Science or in Engineering, namely in Physics, Mathematics, Information Sciences, Computer Science, Electrical Engineering or in some other relevant scientific area, from a recognized university. Students with only a bachelor degree may also be admitted in exceptional circumstances. Candidates who have not yet obtained their Masters degree by the closing date of the call will be eligible provided they hand in a written declaration stating that the degree will be awarded by 31 January 2018. If these conditions are not fulfilled, namely if the official degree certificate is not presented timely, the scholarship will not be awarded.

Furthermore, candidates should be fluent in written and spoken English.

Monthly allowance: In accordance with the monthly maintenance stipend of doctoral scholarships attributed directly by FCT: http://www.fct.pt/apoios/bolsas/valores.phtml.en

See also the DP-PMI web site for further details: http://www.dp-pmi.org/scholarships.html

Period of the Call: The call is open from 16 August 2017 until 30 October 2017.

Applications: Individual applications should be submitted electronically using the application form available via the DP-PMI web site at: http://www.dp-pmi.org/application-form.html

Evaluation Criteria: The DP-PMI involves a two-stage selection procedure. In the first stage, the Governing Board will select and rank the candidates according to the following criteria (equally weighted):

- 1. quality of the candidate's scientific record (i.e. potential articles, contributions to conferences, etc.);
- 2. quality of the candidate's academic record (i.e. marks in the Masters and previous university degrees, quality of the respective institutions and programmes, etc.);
- 3. motivation letter describing the reasons to join the DP-PMI and potential research plans/directions;
- 4. relevance and adequacy of the previous training to joining the DP-PMI.

The submitted documentation, including the reference letters, will be used to assess these four criteria. The candidates with the adequate scientific background, presenting the necessary

high-quality academic track record and high-level scientific potential, obtaining a total score above 80%, will be invited for the second stage of the selection procedure, consisting of an interview, realized in person or via video-conference, or similar. The objective of this interview is for the Governing Board to evaluate the applicant's fluency in English, as well as to obtain further details on the points 1-4 described above, but specially point 3, and accordingly fine tune the selection of the candidates, whose applications will be ranked taking into account their excellence in each of these criteria.

Announcement of results: The results of this call will be published at Instituto de Telecomunicações, in Lisbon, Portugal, within 90 working days after the deadline to submit applications. All applicants will be informed of the results by e-mail, including the score of the interview. If the decision is not favorable for the award of the scholarship, the applicant has a period of 10 working days, after receiving notice of the decision, to contest the decision in a preliminary hearing setting by the DP-PMI Governing Board. Any appeal to the final decision referred above must be brought before the FCT (Portuguese Foundation for Science and Technology) within 15 working days after the notification.

Complementary information: Detailed information about the programme is available in the DP-PMI website: http://www.dp-pmi.org/

Any cases not addressed in the present call are covered by the Regulations for Research Grants of the Foundation for Science and Technology, available at: http://www.fct.pt/apoios/bolsas/regulamento.phtml.en