

Research Studentships for PhD students

Applications are open for 3 Research Studentship for PhD students, within the framework of project/R&D institution 1801P.01293.1.01 X-MASER-2022.02230.PTDC, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Plasma Physics and nuclear Fusion

Admission Requirements: *To be enrolled at a PhD.*

Workplan: Development of work associated with tasks 1-3 of the X-Maser project with emphasis on:

Task 1 - Theoretical extension of the FEL with intense guide fields; systematic inclusion of QED; prediction of observational signatures

Task 2 - Multi-scale integration: extraction of conditions from global simulations → local simulations → feedback

Task 3 - Generalisation of laser plasma models for different instabilities; synthesis of radiation diagnostics

Translated with <https://laratranslate.com> (Present a resume of the activities to carry out, the objectives to achieve, and their relevance for the conclusion of the studies at which the studentship holder is enrolled)

Legislation and Regulations: Statute of Scientific Research Fellow, approved by Law nr. 40/2004, of August 18, as worded by Decree-Law nr. 123/2019, of August 28; FCT Regulation for Research Studentships and Fellowships, available on <https://dre.pt/application/file/a/127230968> .

Workplace: The work will be developed at GoLP-IPFN of IST, under the scientific supervision of Professor Luís Oliveira e Silva

Duration: The research fellowship(s) will have the duration of 6 months. It's expected to begin when all the bureaucratic formalities are accomplished, and may be eventually renewed up to the end of the project.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<https://www.fct.pt/fct-atualizou-o-valor-das-bolsas-para-2025/>), the amount of the monthly maintenance allowance is €1309,64, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following: *Curriculum evaluation*, with the respective weight of 100%

Composition of the selection Jury: Professor Luís Oliveira e Silva, Professora Marta Fajardo, Professor Jorge Vieira

Announcement/ notification of the results: The final evaluation results will be communicated to all applicants by email.

Deadlines and procedures of complaint and appeal. A complaint may be lodged from the final decision within 15 working days, or an appeal to the Executive Board of IST-ID within 30 working days, both counted from the respective notification

Application deadline and formalization: The call is open from January 6 until January 19, 2026.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/recursos-humanos/bolseiros/#documentos-relacionados>); ii) *Curriculum Vitae*; iii) academic degree certificate, where applicable; iv) proof of enrollment at an academic degree course (PhD) or at a course that does not award an academic degree; v) motivation letter;

Applications must be submitted to the email: claudia.romao@tecnico.ulisboa.pt