(BL278/2025-IST-ID)

Research Studentships (for Master students)

Applications are open for two Research Studentship(s), within the framework of project/R&D institution 1801P.01500.1.01) FF-HHG- 2023.14906.PEX - IST ID, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Plasma Physics and nuclear Fusion

Admission Requirements:

- a) To be enrolled at an integrated master or a master.
- b) The candidate should be pursuing a master degree in Physics, ideally specialised in the field of Photonics/Lasers. Experience with structured light will be highly appreaciated

Workplan:

The main steps of the project are the following:

- Design and order the focusing optic (reflective axi-parabola) for the experiment at VOXEL.
- Set-up the DM-SLM pair and measure the spatiotemporal structure that can be synthetised in the lab.
- Set-up the gas target and HHG beamline for the experimental campaign.
- Perform the experiment and model the HHG process with the resulting structured pulses.

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 Pablo Claveria or Marta Fajardo

Duration: The research fellowship(s) will have the duration of 5 months and 10 days. 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 € 1040,98, being the payment method an option of the Fellow by Wire Transfer/Check.

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

Composition of the selection Jury: Pablo Claveria, Marta Fajardo, Gonçalo Figueira.

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 December 22, 2025 until January 6, 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 (Master, Integrated Master); v) motivation letter;

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

