

(BL106/2025-IST-ID)

Post-Doctoral Research Fellowships

Applications are open for 1 Post-Doctoral Research Fellowship(s), within the framework of project/R&D institution (1801P.01325.1.01) XPACE - 101045172 - IST-ID, under the following conditions:

Scientific Area: Plasma Physics and Nuclear fusion

Admission Requirements:

- a) *to hold a PhD degree obtained in the 3 years previously to the beginning of the fellowship contract;*
- b) *to have carried out the research work that led to the PhD degree in a different entity from the host institution of the fellowship;*
- c) *Not to exceed, with this fellowship contract, including the possible renovations, an accumulated period of 3 years in this type of fellowship, continuously or with interruptions;*
- d) *Not to have previously held a post-doctoral fellowship from IST-ID.*
- e) *PhD in Physics, Astrophysics or related fields*

Workplan: - Use plasma theory and numerical simulations (including both MHD and particle-in-cell) to study the plasma processes that control particle acceleration and radiation emission in astrophysical plasmas, such as those associated with relativistic jets and collisionless shocks

- Develop reduced models and multi-scale simulations for the global modelling of particle acceleration in astrophysical systems

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; IST-ID Regulation of Scientific Research Fellowships, available on <https://ist-id.pt/recursos-humanos/bolseiros/#documentos-relacionados>.

Workplace: The work will be developed at GoLP of Instituto Superior Técnico, under the scientific supervision of Professor Frederico Fiuza.

Duration: The research fellowship(s) will have the duration of 12 months. It's expected to begin when bureaucratic formalities are fullfield, and may be eventually renewed up to the maximum of 36 months, including the duration of the initial contract.

Monthly maintenance allowance, the amount of the monthly maintenance allowance is € 1851, being the payment method of the Fellow by wire transfer.

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

Composition of the selection Jury: Frederico Fiúza, Luís Miguel de Oliveira e Silva, Marta Fajardo

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, or an appeal to the Executive Board of IST-ID, within 15 working days counted from the respective notification.

Application deadline and formalization: The call is open from April 14 until April 21, 2025.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/concursos/bolsas/>); ii) *Curriculum Vitae*; iii) academic degree certificate; iv) motivation letter; v) declaration on honour that the applicant does not exceed with this contract an accumulated period of three years in this type of fellowship, continuously or with interruptions, within the technological and scientific system, and that the research work that led to the PhD degree was carried out in a different entity from the host institution of the fellowship.

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