(BL224/2025_IST-ID)

Research Studentships (for students of a course that does not award an academic degree)

Applications are open for 1 Research Studentship, within the framework of project/R&D institution FCT/ERC-Portugal 1801P.01397 – ERC-Portugal GravNewFields financed by national funds through FCT with the financial support of FCT through national funds, under the following conditions:

Scientific Area: Astronomy and Astrophysics FIS-AST

Admission Requirements:

a) to hold a bachelor or master degree and be enrolled at a course that does not award an academic degree and it is integrated in the educational project of a higher education institution, performed in association or cooperation with one or several R&D units;

b) not to exceed with this contract, including the possible renovations, an accumulated period of two years in this type of studentship, continuously or with interruptions.

Workplan: The fellow is expected to investigate relativistic gravitational perturbations of Proca stars, with particular emphasis on the study of binary systems in which a low-mass compact stellar object orbits these stars. The goal is to compare the results with Newtonian approximations, to predict the gravitational waves emitted by such systems, and to assess their potential detectability by the future LISA mission.

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://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf and https://dre.pt/application/file/a/127230968.

Workplace: The work will be developed at CENTRA - Centro de Astrofísica e Gravitação of IST – Instituto Superior Técnico, under the scientific supervision of Prof. Richard Brito.

Duration: The research fellowship(s) will have a duration of 12 months. It's expected to begin on November 1st 2025 and may be eventually renewed.

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.

Selection methods: The selection methods will be the following: Curriculum evaluation and individual interview, with the respective weight of 50%+50%.

Composition of the selection Jury: Richard Pires de Brito, Vitor Cardoso, David Hilditch.

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 September 29 until October 15, 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, where applicable; iv) proof of enrollment at a course that does not award an academic degree;



