## (BL255/2024\_IST-ID)

## Research Studentship (for PhD students)

## FCT/ERC-Portugal 1801P.01397 - GravNewFields

Applications are open for 1 Research Studentship, within the framework of project/R&D institution FCT/ERC-Portugal 1801P.01397 – 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:** To be enrolled in a PhD.

**Workplan:** The research will take place as part of the project "Opportunities in the gravitational sky: Searching for new fundamental fields with Black Holes and Gravitational Waves". The fellow will be expected to study extreme-mass-ratio inspirals, binary systems in which a stellar-mass compact object orbits a supermassive black hole with millions of solar masses, in scenarios where the massive black hole is surrounded by a bosonic cloud, in order to understand whether such environments could be detected by the future space-based gravitational-wave detector LISA.

**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 <a href="https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf">https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf</a> and <a href="https://dre.pt/application/file/a/127230968">https://dre.pt/application/file/a/127230968</a>.

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

**Duration:** The research fellowship will have a duration of 12 months. It's expected to begin from January 1st 2025 to March 1st 2025, and may be eventually renewed up to the maximum of 48 months, including the duration of the initial contract.

Monthly maintenance allowance: the amount of the monthly maintenance allowance is €1259,64 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.

**Application deadline and formalization**: The call is open from 28/10 until 15/12/2024.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<a href="https://ist-id.pt/concursos/bolsas/">https://ist-id.pt/concursos/bolsas/</a>); ii) Curriculum Vitae; iii) academic degree certificate, where applicable; iv) proof of enrollment at an academic degree course (PhD).

Applications must be submitted to the email: <a href="mailto:richard.brito@tecnico.ulisboa.pt">richard.brito@tecnico.ulisboa.pt</a>





fundação para a Ciência e a Tecnologia