

(BL57/2023-IST-ID)

Post-Doctoral Research Fellowships

Applications are open for 1 Post-Doctoral Research Fellowship within the framework of projectprojeto 'Física Fundamental com Buracos Negros e Ondas Gravitacionais: uma nova era de descobertas', acrónimo DisBHGW, P. 01271/CENTRA 2022.01324.PTDC, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Astronomy and Astrophysics

Admission Requirements:

- a) to hold a PhD degree obtained in the 3 years previously to the submission of the fellowship application;
- 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.

Workplan: The research will take place as part of the project "Fundamental physics with black holes and gravitational waves: a new age of discoveries" that aims at exploring how future gravitational-wave and black-hole observations can be used to study different aspects of fundamental physics, such as probing the nature of dark matter or gravity itself. In particular, among the main goals will be to study the impact that ultralight bosons or more generic forms of dark matter can have on the dynamics of binary black hole systems and on the gravitational waves emitted by those binaries. In addition, the researcher will also be given the opportunity to pursue independent research ideas that can contribute to the project's objectives.

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 , at Physics Department of IST, under the scientific supervision of Dr. Richard Pires de Brito

Duration: The research fellowship(s) will have the duration of 12 months. It's expected to begin in march 2023 and may be eventually renewed up to the maximum of 6 months.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<http://www.fct.pt/apoios/bolsas/valores>), the amount of the monthly maintenance allowance is € 1686,00€ being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following: *Curriculum evaluation, letter of interest* with the respective weight of 50%+50%.

Composition of the selection Jury: Richard Pires de Brito, Vitor Manuel dos Santos Cardoso, David Matthew 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 March 1 until March 14, 2023.

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: richard.brito@tecnico.ulisboa.pt