

Research Studentships (Master or Integrated Master students)

Applications are open for 1 Research Studentship, within the framework of project “**Portuguese participation in the n_TOF experiments at CERN (2020-2021)**”, (ref. CERN/FIS-PAR/0020/2019), financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Particle Physics and Nuclear Physics

Admission Requirements:

Candidates must:

- a) Be enrolled at an integrated master or a master in Physics, Physics Engineering, Technological Physics Engineering, Radiation Protection and Safety or related scientific areas
- b) Preferably, hold knowledge and competence in Nuclear Physics, Radiation Physics and/or previous experience with simulations using Monte Carlo methods.

Workplan:

The selected candidate will:

- Participate, in the framework of the C2TN/IST Group member of the n-TOF Collaboration at CERN, undertaking experimental, computational and data analysis activities of neutron induced cross-sections, in the TOF (“Time of Flight”) spectrometer at CERN, in Geneva.
- Develop and strengthen competence in experimental Nuclear Physics and Particle Physics, in neutron and photon detection systems, in computational methods including Monte Carlo simulations in Radiation Physics, in Radiation Protection and Radiation Dosimetry and in nuclear data cross-sections of relevance for Nuclear Technology applications and Nuclear Astrophysics.

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 “Centro de Ciências e Tecnologias Nucleares” of IST, under the scientific supervision of Prof. José Pedro Miragaia Trancoso Vaz.

Duration: The research fellowship will have the duration of 9 months. It’s expected to begin in November 2021, and may not be renewed.

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 € 835,98, being the payment method an option of the Fellow by Wire Transfer.

Selection methods: The selection methods will be the following: Curriculum evaluation and, if needed, individual interview (presencial or Via Zoom or other system). If an interview will be needed, the following weighting factors will be applied: of Curricular evaluation (70%), interview (30%).

Composition of the selection Jury:

- José Pedro Miragaia Trancoso Vaz (President)

- Yuriy Romanets (jury member)
- Octávia Gabriela Silva Viegas Monteiro Gil (jury member)

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 12 until 25 November 2021.

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 an academic degree course (Master, Integrated Master); v) motivation letter;

Applications must be submitted to the email: Patricia Russo, patricia.russo@ctn.tecnico.ulisboa.pt