

EURAXESS

Call for Applications for a Doctoral Scholarship – ATLAS Group

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Apply

13 May 2023

Job Information

Organisation/Company	LIP - Laboratório de Instrumentação e Física Experimental de Partículas
Department	LISBON
Research Field	Physics » Applied physics
Researcher Profile	First Stage Researcher (R1)
Country	Portugal
Application Deadline	14 Jul 2023 - 17:00 (Europe/Lisbon)
Type of Contract	Temporary
Job Status	Full-time
Hours Per Week	35
Offer Starting Date	1 Sep 2023
Is the job funded through the EU Research Framework Programme?	Not funded by an EU programme
Reference Number	Financiamento de Unidades de I&D – LIP/50007_ATLAS group
Is the Job related to staff position within a Research Infrastructure?	No

Offer Description

LIP opens a call for applications for a Doctoral Scholarship in the domain of experimental particle physics. The grant will be funded by the Foundation for Science and Technology (FCT) under the Collaboration Agreement "*Financiamento do Plano Plurianual de Bolsas de Investigação para Estudantes de Doutoramento*", signed between the FCT and LIP, R&D Unity No. 50007.

PhD studentships will be granted to applicants that fulfill the requirements to join a study cycle towards a PhD degree, and wish to develop research work in particle physics or related domains at a Portuguese University, hosted by LIP, without prejudice to the work being carried out in collaboration with more than one institution. The research activities must be integrated in LIP's activity plan and strategy.

Work plan and Supervision:

The work will be carried out within the LIP group participating in the ATLAS experiment at the Large Hadron Collider (LHC). The team, with nearly 50 members, develops its activities both in the detector operation and upgrade (Tile hadronic calorimeter, forward spectrometers, high granularity timing detector, trigger), and in the data analysis for physics searches and precision measurements (Higgs, quark and gluon plasma, New Physics searches). Besides, the candidate will benefit from the collaboration with international groups within the ATLAS Collaboration and will work at the CERN site to participate in the detector data-taking activities.

The work plan is the search for New Physics Phenomena with Anomaly Detection techniques. The candidate will develop Machine Learning models with the ability to recognise the expected background and detect potential New Physics events.

The scientific supervision of the candidate will be ensured by Prof. Nuno Castro and Dr. Rute Pedro.

The candidates formalize their application by sending the following documents (mandatory) by email to natalia@lip.pt:

- One CV file in pdf format (indicating contacts, full address, ID card/passport number);
- One Motivation Letter file in pdf format;
- One PDF file containing certificates of all the academic degrees obtained, with the final average grade and marks in all subjects;
- One PDF file containing the academic degree recognition and conversion of the final grade to the Portuguese grading scale or the presentation of the recognition/equivalence, registered by a public higher education institution;
- Two reference letters.

Requirements

Research Field	Physics
Education Level	Master Degree or equivalent

Skills/Qualifications

Only candidates who have completed the cycle of studies leading to a Bachelor's or Master's degree by the end of the application period will be admitted.

Physics or related areas.

Programming skills (Python, C++) knowledge of analysis tools (ROOT, etc...)

Fluent in English

Specific Requirements

The candidate should provide a clear demonstration of the ability to carry out a research program.

Languages ENGLISH

Level Excellent

Research Field Physics

Years of Research Experience 1 - 4

Additional Information

Benefits

The selected applicant will be awarded monthly stipends and supplementary support, which may include tuition fees, relocation costs, travel awards and health insurance, whenever applicable, as detailed in the FCT Regulations.

https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM_2023.pdf

Eligibility criteria

Requirements:

Only candidates who have completed the cycle of studies leading to a Bachelor's or Master's degree by the end of the application period will be admitted. In order to comply with the foreseen applicable Portuguese legislation regarding the recognition of foreign qualifications, all the rights inherent to academic degrees granted by foreign higher education institutions is duly recognised to the holders of these degrees. This recognition is subject to the presentation of **the academic degrees recognition and conversion of the final grade to the Portuguese grading scale**, requested to the Dean of a public Portuguese University, the Head of a Public Polytechnic Institute or the Director-General for Higher Education; or by the presentation of the **recognition/equivalence**, registered by a public higher education institution. For further information: <http://www.dges.gov.pt>.

Candidates who do not yet have their degree certificate may present a declaration of honor, stating that they have completed the necessary qualifications for the purposes of the call by the end of the application deadline. The granting of the scholarship will depend on the presentation of all the documents. For candidates with diplomas issued by foreign institutions the academic degrees recognition and conversion of the final grade to the Portuguese grading scale or the presentation of the recognition/equivalence will be required for the granting of the scholarship.

The presentation of the degree certificates in the application form is determinant for evaluation purposes, namely to calculate the score of A1, a sub-criterion of the Merit of the Applicant. In case of academic degrees obtained abroad, only degrees with the respective records of recognition/equivalence and conversion to the Portuguese grading scale will be considered to calculate the score of A1 sub-criterion (minimum grade = 0 if no recognition).

Selection process

Evaluation takes into account two criteria:

Criterion A - Merit of the Applicant

The criterion A, which has a 50% relative weight to the final score, is evaluated based on two sub-criteria:

A1. Academic career, with a relative weight of 20% in the Merit of the Applicant.

The academic career sub-criterion is calculated according to the final classification stated in the academic degree certificate, submitted in the application form, according to Table 1: i) Graduate + Master / Integrated Master; ii) Graduate degree only; or iii) Master degree only. (See Table 1 and Table 2 available in the PT version of the call)

Although it is not mandatory to submit degree certificates for the admission to the call, **documental evidence of the classifications obtained in the academic degrees is mandatory for the evaluation of the sub-criterion A1.**

In case no valid academic degree certificate is submitted, the sub-criterion A1 will be scored zero (A1 = 0).

To apply the scoring system presented in Table 1, it is mandatory to submit the following documents:

1. Academic degree certificates, indicating the final grade and, if possible, the final classification of the disciplines completed. Applicants with post-Bologna education shall present both 1st and 2nd study cycles academic degree certificates or an integrated master certificate, while applicants with pre-Bologna education should present the graduate and/or master degree certificates. It should be noted that a certificate of curricular units does not substitute the submission of a degree certificate including the degree's final grade required to the sub-criterion A1 calculation.
2. In case of foreign academic degrees it is mandatory to submit the recognition of such degrees and the conversion of the respective final grade to the Portuguese grading scale, to guarantee the principle of equal treatment to applicants with national and foreign academic degrees.

A2. Personal curriculum (reflecting the scientific, professional and academic career, when applicable, and the applicant's motivation to proceed with this study cycle) with a relative weight of 30% in the Merit of the Applicant.

Criterion B – Adequacy of the candidate's experience to the working program with a relative weight of 50%

Final classification = $(0.2 \times A1) + (0.3 \times A2) + (0.5 \times B)$

For purposes of tiebreak, the final ranking list will be based on the scores assigned to each of the evaluation criteria in the following order: criterion B, criterion A.

All applications will be graded from 0 (zero) to 100 (maximum) in each of the two evaluation criteria.

Applicants whose application is scored with a final grade lower than 60 points will not be eligible for studentship granting.

Disability Bonuses

Applicants that state a degree of disability equal to or above 90% shall have a bonus of 20% on criterion A – Merit of the Applicant.

Applicants that state a degree of disability equal to or above 60% and under 90%, shall have a bonus of 10% in this criterion.

The degree of disability should be duly proven by submitting, in the application form, the document **Atestado Médico de Incapacidade Multiuso (AMIM)**, issued according to the Decree-Law no. 202/96, of 23 of October, in its current version.

Members of the Jury:

- Prof. Patricia Conde, LIP and IST (Panel Chair)
- Prof. Ricardo Gonçalo, LIP and UC;
- Dr. Helena Santos, LIP;
- Dr. Inês Ochoa, LIP.

Additional comments

Disclosure of results :

The results of the evaluation will be communicated to the applicants by email. In case of a negative decision, applicants dispose of a period of 10 days in which to oppose the decision in a preliminary hearing, as stated in articles 121 and following of the Code of Administrative Procedure. The panel's final decision will be taken after analysis of the applicant's arguments and the candidates notified. In case of disagreement, the candidates have a period of 15 working days to contest the decision. A final appeal may also be lodged with the highest body of the funding entity (FCT) within a period of 30 working days after the announcement of the jury's final classification.

Funding:

The scholarship contracts will be signed with FCT. The attribution of grants is conditional on the presentation of all required documentation and on the admission of the candidate by the Institution granting the academic degree, as well as subject to the availability of FCT funds. The lack of any of the necessary documents to complete the contracting procedure implies the expiration of the studentship granting and conclusion of the process; applicants have up to 6 months after the disclosure of the provisional granting to present all of the listed documents.

The scholarship awarded by FCT under this contract will be financed by funds from the Portuguese State Budget and, when applicable, by funds from the European Social Fund through the Operational Program (PDQI).

Equality and non-discrimination Policy:

We are committed to promoting equality and preventing discrimination, and welcome applications of all qualified candidates irrespective of their age, disability, gender, marital status, pregnancy, maternity, gender identity, race, colour, nationality, ethnicity or national origin, sexual orientation, religion or belief, social background or culture or trade union membership.

Website for additional job details

<https://www.lip.pt/?section=about&page=recruitment>

Work Location(s)

Number of offers available	1
Company/Institute	LIP/Minho
Country	Portugal
City	Braga
Postal Code	4710-057
Street	Campus Gualtar, CP3 3.02

Where to apply

E-mail natalia@lip.pt

Contact

City LISBON

Website <https://www.lip.pt>

Street Av. Prof. Gama Pinto, nº 2

Postal Code 1649-003

E-Mail natalia@lip.pt