08/09/2022

Research Student Fellowship (BI – Bachelor)

Where to apply

Application Deadline: 26/09/2022 17:00 - Europe/London

Contact Details

Where to send your application.

COMPANY
LIP - Laboratório de Instrumentação e Física Experimental de Partículas

E-MAIL
ofelia@lip.pt

Hiring/Funding Organisation/Institute

ORGANISATION/COMPANY
LIP - Laboratório de Instrumentação e Física Experimental de Partículas

DEPARTMENT
LISBON

ORGANISATION TYPE
Research Laboratory

WEBSITE
http://www.lip.pt

E-MAIL
natalia@lip.pt
ofelia@lip.pt

COUNTRY
Portugal

CITY
LISBON

POSTAL CODE
1649-003

STREET
Av. Prof. Gama Pinto, nº 2

ORGANISATION/COMPANY
LIP - Laboratório de Instrumentação e Física Experimental de Partículas

RESEARCH FIELD
Physics

RESEARCHER PROFILE
First Stage Researcher (R1)

LOCATION
Portugal › LISBON

TYPE OF CONTRACT
Temporary

JOB STATUS
Full-time

APPLICATION DEADLINE
26/09/2022 17:00 - Europe/London

HOURS PER WEEK
35

OFFER STARTING DATE
01/10/2022

REFERENCE NUMBER
EXPL/FIS-PAR/1195/2021 - BI (lic)

OFFER DESCRIPTION

LIP opens a call for selection of fellows for one Research Student Fellowship (BI – Bachelor) for participation in the project “The strong force and multiparticle dynamics at hadron colliders”, reference EXPL/FIS-PAR/1195/2021, funded by FCT/MCTES through national funds (State Budget – OE).

Work plan:

The work plan will be carried out in the context of the activities of the LIP Phenomenology group, in particular,

within the effort to perform a detailed analysis of final state rapidity-azimuthal angle correlations at proton-proton and heavy ion collisions (Large Hadron Collider at CERN, Switzerland and Relativistic Heavy-Ion Collider at BNL, USA).

The candidate will implement non linear effects to the Monte Carlo code BFKLex which have the effect of taming the growth of final state gluons by introducing the notion of parton saturation to connect with studies originating within the Color Glass Condensate framework. The candidate will study how the quantitative and qualitative characteristics of the final state correlation distributions change in comparison to the case where saturation effects are not included. The work will be mainly focused on a computational component. At a first stage, the candidate will run the Monte Carlo simulations at partonic level, whereas later the simulations will be carried out after the inclusion of PDFs and parton showers.

This project is particularly relevant to the investigation of the high energy QCD limit at both the LHC and RHIC.

Legislation:

A fellowship contract will be established according to the “Regulations for Research Grants of the Foundation for Science and Technology” (https://files.dre.pt/2s/2019/12/241000000/0009100105.pdf) and to the Status of Scientific Research Fellow (Law nº 40/2004, August 18th, and its successive amendments).

Duration:

The fellowship has a duration of 6 months, with a foreseen starting date on October 1, 2022. The fellowship may eventually be renewed, until the maximum foreseen in the project and according to the terms of the FCT regulations.

The working plan will be carried out under the supervision of Dr. Grigorios Chachamis.

Applicants should submit a curriculum vitae, Bachelor diploma and a list and grades of university courses and other relevant documents, as a PDF file, by email to natalia@lip.pt and ofelia@lip.pt

Application period: From September 12 to September 26

More Information

ADDITIONAL INFORMATION

Benefits

The monthly amount of 875,98€ is in accordance with the values stipulated in the “FCT Regulation for Research Studentships and Fellowships”:
https://www.fct.pt/apoios/bolsas/docs/Tabela_de_Valores_SMM_2022.pdf
This amount will be paid on a monthly basis through a bank transfer to the grant holder's bank account.
Other components, such as installation or travel support, if applicable, will be paid according to the same rules.

Eligibility criteria

Applicants should fulfil the requirements to join a course granting a higher academic degree (Master) or in a non-academic

degree course, as stipulated in the “Regulations for Research Grants of the Foundation for Science and Technology” (Article 6). When contracting, it will also be necessary the candidate present a proof of enrolment in the course granting, or not, a higher academic degree.
In the event of the degree was awarded by a foreign higher education institution, the degree must comply with the provisions of the Decree-Law nº. 66/2018, of 16 august (https://www.dges.gov.pt/en/pagina/degree-and-diploma-recognition?plid=1536). The selected candidate must provide the recognition of the degree when signing the contract.

Selection process

Evaluation:
The members of the jury will take into consideration the CV (50%) and the research experience in the required field (50%). If none of the candidates fulfils the appropriate profile, the scholarship will not be awarded.
Members of the Jury:

Dr. Grigorios Chachamis (LIP)

Dr. João Pires (LIP)

Dr. Liliana Apolinário (LIP)

Alternate Members

Prof. Ricardo Gonçalo (Universidade de Coimbra e LIP)

Prof. José Guilherme Milhano (IST/LIP)

Additional comments

The results of the evaluation will be communicated by email; in case of disagreement, the candidates have a period of 10 working days to contest the decision, as provided for in the Code of Administrative Procedure in a preliminary hearing. At the end of this period, the arguments presented will be analysed by the jury committee, who will simultaneously communicate the final decision to all the candidates who submitted allegations. The final results of the shortlisted applicants will be communicated by e-mail. In case of disagreement, the candidates have a period of 15 working days to contest the decision.

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.

Web site for additional job details

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

Required Research Experiences

RESEARCH FIELD
Physics

YEARS OF RESEARCH EXPERIENCE
1 - 4

Offer Requirements

REQUIRED EDUCATION LEVEL
Physics: Bachelor Degree or equivalent

REQUIRED LANGUAGES

ENGLISH: Excellent

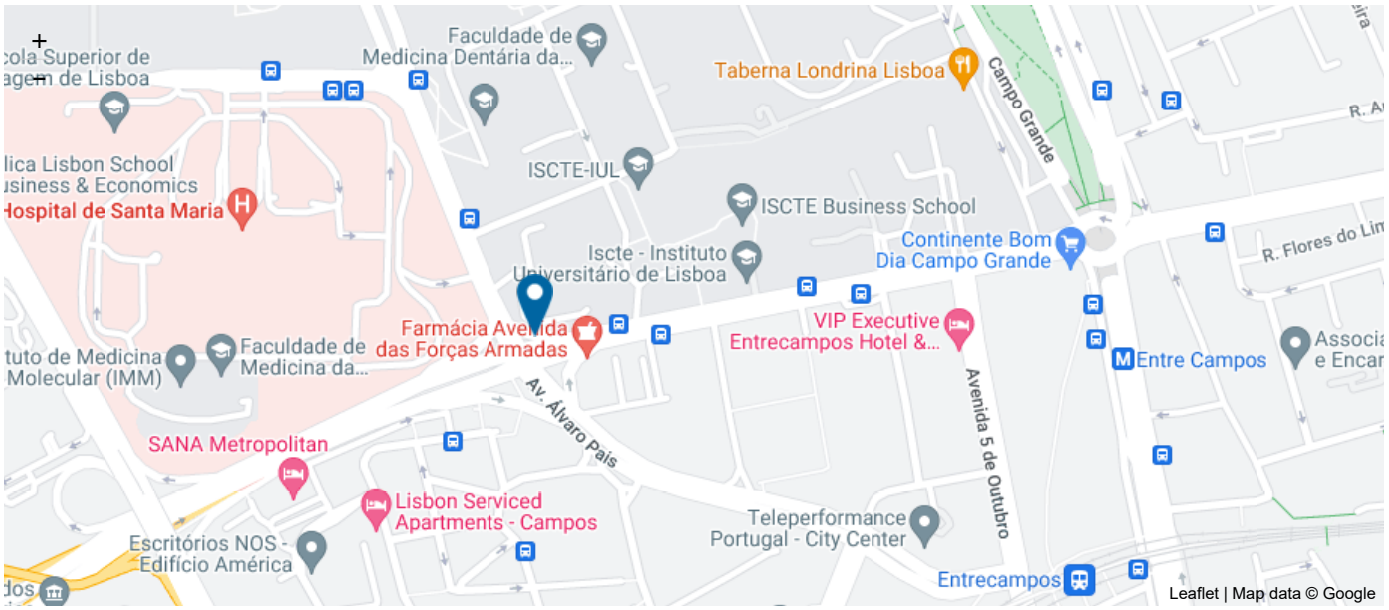
Skills/Qualifications

Knowledge of Particle Physics, Quantum Field Theory and Quantum Chromodynamics; experience in C/C++, Python and ROOT.

Specific Requirements

Knowledge on heavy ion physics will also be favoured.

Map Information



Job Work Location Personal Assistance locations

WORK LOCATION(S)

1 position(s) available at
LIP - Laboratório de Instrumentação e
Física Experimental de Partículas
Portugal
LISBON
1649-003
Av. Prof. Gama Pinto, nº 2

EURAXESS offer ID: 834604

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