EURAXESS

Job offer

JOB PORTUGAL

LIP - Laboratório de Instrumentação e Física Experimental de Partículas | Posted on: 3 July 2024

Research Student Fellowship (BI – Master)- AUGER Group

Apply now *(mailto:natalia@lip.pt?subject=Research Student Fellowship (BI – Master)- AUGER Group)*

Add to Favorites

Share

View *(/jobs/251844)* **Edit *(/node/251844/edit)*** **Delete *(/node/251844/delete)***

Apply

3 Jul 2024

Job Information

Organisation/Company	LIP - Laboratório de Instrumentação e Física Experimental de Partículas
Department	LISBON
Research Field	Physics
Researcher Profile	First Stage Researcher (R1)
Positions	PHD Positions
Country	Portugal
Application Deadline	19 Jul 2024 - 17:00 (Europe/Lisbon)
Type of Contract	Other
Type of Contract Extra Information	Research Fellowship
Job Status	Full-time
Hours Per Week	35
Offer Starting Date	1 Sep 2024
Is the job funded through the EU Research Framework Programme?	RE-C06-i06 - Ciência Mais Capacitação - PRR
Reference Number	2024.06879.CERN

Is the Job related to staff position within a Research Infrastructure?	No

Offer Description

LIP opens a call for a **Research Student Fellowship (BI – Master)** for participation in the project: “Physics with UHECRs at the Pierre Auger Observatory” funded by the program “Call for IC&DT Projects: Co-operation between Portugal and CERN - RE-C06-i06 - Ciência Mais Capacitação - PRR“ under the reference 2024.06879.CERN.

Work plan:

One of the main goals of the Auger-LIP group project is to measure the energy spectrum of the secondary particles in extensive air showers (EAS) generated by ultra-high-energy cosmic rays (UHECRs). This challenging measurement is crucial for enhancing our understanding of shower development and addressing the muon puzzle, which has hindered progress in the UHECR field over the past decade.

The group is currently exploring novel strategies to measure this quantity by using the newly commissioned MARTA station and leveraging the recently installed scintillator detectors (SSD) as part of the AugerPrime upgrade.

The selected candidate will participate in the data analysis of MARTA+SSD and evaluate the proposed experimental procedures for measuring the EAS particle energy spectrum through dedicated simulations.

The working plan will be carried out at LIP-Lisbon under the supervision of Prof. Ruben Conceição.

Legislation:

The fellowship contract will be established according to the “Regulations for Research Grants of the Foundation for Science and Technology” (https://files.diariodarepublica.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 12 months, with a foreseen starting date on September 2024, eventually renewable.

Applicants should submit:

a motivation letter and a curriculum vitae (both in English), Master certificate and a including the list of classifications obtained in the different curricular units, and other relevant documents, as a PDF file, by email to natalia@lip.pt

Where to apply

E-mail	natalia@lip.pt

Requirements

Research Field	Physics
Education Level	Master Degree or equivalent

Skills/Qualifications

Research fields:

- Physics

- Astroparticle Physics (Ultra-high-energy cosmic rays; Extensive Air Showers)

Demonstrable knowledge of astroparticle physics with particular emphasis on extreme energy cosmic rays. Programming skills in C++ and/or Python. Previous experience in studying atmospheric cascades and analysing Monte Carlo data. Preferred factor: experience with the Pierre Auger Collaboration Offline software.

Specific Requirements

The candidate must hold a Master's degree in Physics, Physics Engineering or a related field. The candidate must also be enrolled in a study cycle leading to the award of an academic degree or in a non-academic degree course in accordance with paragraphs 1 and 2 of article 6 of the Regulation for Research Grants of the Foundation for Science and Technology.

Previous experience in studying atmospheric cascades and analysing Monte Carlo data. Preferred factor: experience with the Pierre Auger Collaboration Offline software.

Languages	ENGLISH
Research Field	Physics
Years of Research Experience	1 - 4

Additional Information

Benefits

The monthly amount of € 1259.64, is in accordance with the values stipulated in the “FCT Regulation for Research Studentships and Fellowships”:

https://www.fct.pt/wp-content/uploads/2024/02/Tabela-de-Valores-SMM_atualizacao-2024.pdf

This amount will be paid on a monthly basis through a bank transfer to the grant holder's bank account.

Eligibility criteria

Applicants should fulfil the requirements to join a course granting a higher academic degree (Doctorate) 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, the candidates will need to present a proof of enrollment in the course, in the conditions above described.

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=1…). The selected candidate must provide the recognition of the degree when signing the contract.

Selection process

The members of the jury will take into consideration the CV (50%) and the required field adequation (50%). If none of the candidates fulfils the appropriate profile, the scholarship will not be awarded.

Members of the Jury:

Effective

- Prof. Ruben Conceição
- Prof. Dr. Patrícia Gonçalves
- Prof. Dr. Mário Pimenta

Alternate

- Prof. Pedro Assis
- Prof. José Guilherme Milhano

Advertising / notification of results:

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.

Additional comments

Non-discrimination and equal access policy: LIP actively promotes a non-discrimination and equal access policy, wherefore no candidate can be privileged, benefited, impaired or deprived of any rights whatsoever, or be exempt of any duties based on their ancestry, age, sex, sexual preference, marital status, family and economic conditions, instruction, origin or social conditions, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, origin territory, language, religion, political or ideological convictions and 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 - Laboratório de Instrumentação e Física Experimental de Partículas
Country	Portugal
State/Province	LISBON
City	LISBON
Geofield	

Contact

City	LISBON
Website	http://www.lip.pt
Street	Av. Prof. Gama Pinto, nº 2
Postal Code	1649-003
E-Mail	natalia@lip.pt

Apply now *(mailto:natalia@lip.pt?subject=Research Student Fellowship (BI – Master)- AUGER Group)* Add to Favorites

---

Share this page

- X (formerly Twitter)
- Facebook
- LinkedIn
- Whatsapp
- More share options