



LABORATÓRIO DE INSTRUMENTAÇÃO E FÍSICA EXPERIMENTAL DE PARTÍCULAS

Job: ANNOUNCEMENT FOR THE OPENING OF AN INTERNATIONAL SELECTION TENDER PROCEDURE FOR DOCTORATE HIRING.

Main Research Field: Physics

Job Summary:

The Laboratory of instrumentation and Experimental Particle Physics (LIP) has an immediate opening for a doctorate (Auxiliary Researcher) to carry out research in the scientific area of Particle Physics and join the LIP team collaborating in the CMS experiment at the LHC. The candidate will be hired under a non-fixed term work contract (maximum period of 43 months), pursuant to the dispositions of article 6 (1) (b) and (3) and article 7 of the Decree-Law no. 57/2016 of 29th August, updated by the Law no 57/2017, of 19th July and to the Labour Code, under its current reading. This contract is funded in the framework of the Programmatic Funding approved under article 12 (1) (b) of the “Regulamento de Avaliação e Financiamento Plurianual de Unidades de I&D”, with the reference UIDP/50007/2020, (supported by national budget).

Requirements:

The candidates for the position should have a Ph.D. in Physics or equivalent, excellent experimental and collaborative skills, and provide a clear demonstration of the ability to carry out an independent research program. The successful candidate will perform scientific work in an internationally competitive environment.

Work Plan:

The LIP-CMS group is involved with a leading role in data analysis (Top, B, quarkonium, heavy ions, Susy, exclusive production, and Higgs) and in several detector projects (PPS, ECAL, and the MTD and ECAL HL-LHC detector upgrades for Phase2). At LIP, we operate a Tier-2 computer center, provide resources for data analysis both locally and as a part of the CMS computing grid.

The successful candidate will participate to the group activities both in the detector operations and R&D, and in the data analysis. The activities are centered on the current group activities, Run2 data and preparation for a leading contribution in the LHC Run3. The successful candidate is expected to play a major role in the Run3 and Phase2 group efforts.

The work plan will be carried out in the framework of the activities of the LIP group in the CMS experiment, one of the outstanding research groups in High Energy Physics in Portugal. In the Report of the recent Institutional Evaluation performed by an international review panel nominated by FCT the quality of the LIP-CMS group was explicitly recognized: “The CMS group, while



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small in size, is really outstanding and world-class. A member of LIP was deputy spokesperson of the CMS collaboration at the time of the Higgs discovery, and has supplied physics working group co-conveners of the CMS Higgs Physics analysis, the Top Quark Physics analysis and the CMS B and Quarkonium Physics group. This is a remarkable achievement for such a small group, to be leading three of the most important physics analysis groups.”

Applicable Legislation:

- Decree-Law no. 57/2016 of 29th August, which approved the regime for hiring of doctorate holders destined to stimulate scientific and technological employment for all knowledge areas (RJEC), updated by the Law no 57/2017, of 19th July;
- Labour Code approved by Law no. 7/2009 of 12th February, under its current reading;
- Regulatory Decree no 11-A/2017, of 29th December.

Pursuant to article 13 of RJEC, the tender selection panel shall be formed by Prof. João Varela, Prof. Mário Pimenta and Dr. Michele Gallinaro.

Research activities will be based in Lisbon with regular trips to CERN.

Monthly remuneration to be paid is the one defined by articles 15 (1) of the Law nº 57/2017, of 19th July, corresponding to level 1 of the category "Investigador Auxiliar", i.e. 3.191,82 Euros (Estatuto da Carreira de Investigação Científica).

Any national or foreign candidate who holds a doctorate degree in Physics or related scientific area and a scientific and professional curriculum whose profile is suited for the activity to be performed can submit his/her application. In the event of the doctorate degree having been awarded by a foreign higher education institution, the degree must comply with the provisions of Decree-Law no. 341/2007 of 12th October.

General tender admission requirements are specified in the previous section.

Pursuant to article 5 of RJEC, selection is to be made based on the candidate's scientific and curricular career evaluation of the candidates whose application is considered admissible.

Scientific and curricular career evaluation focuses on relevance, quality and topicality:

- a) of scientific, technological production in the last five years, in the areas relevant for the activities of the LIP-CMS group;
- b) of research activities, applied or based on practical work, developed in the last five years, in the areas relevant for the activities of the LIP-CMS group;
- c) of the management of science, technology and innovation programmes.



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Evaluation criteria are as follows:

- a) scientific and technological production in the last five years (40%);
- b) research activities, applied or based on practical work, developed in the last five years (40%);
- c) knowledge extension and dissemination activities developed in the last five years and management of science, technology and innovation programmes (30%).

Each member of the panel will evaluate each candidate in each stated criterium, taking into account the requirements of the duties to be performed, the adequacy of previous experience, his/her relationship to the relevant areas and sub-areas.

The final classification (CF) is stated in a zero (0) to one-hundred (100) scale and obtained according to $CF = 0,60*a) + 0,30*b) + 0,10*c)$.

The panel shall deliberate by means of roll-call vote, justified under the adopted and disclosed selection criteria, with no abstentions allowed.

Minutes of panel meetings will include a summary of all occurrences of said meeting, as well as of all votes casted by the members and respective reasoning, and shall be provided to candidates whenever requested.

After selection criteria application, the panel shall prepare an ordered list of the approved candidates with corresponding classifications.

The panel final decision shall be validated by the head of the Institution, who is also responsible for the hiring.

Application formalization shall be made by sending:

- Motivation letter;
- Detailed Curriculum Vitae;
- Certificate or diploma copy. Recognition of foreign diploma should also be delivered, if applicable;
- Up to three recommendation letters which should be sent by the referees to natalia@lip.pt, mentioning the call and name of the candidate;
- A copy of the PhD dissertation;
- Other documentation relevant for the evaluation of qualifications in a related scientific area.

Candidates shall submit their application in one PDF file, by email to: natalia@lip.pt.

The call is open from 05th to 23rd of April 2020, 17:00 (Lisbon time).

All candidates who formalise their applications in an improper way or fail to prove the requirements imposed by this tender are excluded from admission. In case of doubt, the panel is entitled to request any candidate to present further documentation supporting his/her statements.



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False statements provided by the candidates are punished by law.

Both admitted and excluded candidate list and final classification list shall be published in the website of LIP: <http://www.lip.pt> and all candidates shall be notified by email with delivery receipt.

Preliminary Hearing and Final Decision Deadline: Pursuant to article 121 of the Administrative Procedure Code, after notified, all candidates have 10 working days to respond. Panel's final decisions are pronounced within a period of 90 days, from application deadline.

This tender is exclusively destined to fill the vacancy and can be terminated at any time until approval of final candidate list, expiring with the respective occupation of said vacancy.

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.

The panel has approved this announcement in a meeting held on 10th October 2019.

Pursuant to article 3 (3) of Decree-Law no. 29/2001 of 3 February, disabled candidates shall be preferred in a situation of equal classification, and said preference supersedes any legal preferences. Candidates must declare, on their honour, their respective disability degree, type of disability and communication/expression means to be used during selection period on their application form, under the above regulations.