LABORATÓRIO DE INSTRUMENTAÇÃO
E FÍSICA EXPERIMENTAL DE PARTÍCULAS

LIP (Laboratório de Instrumentação e Física Experimental de Partículas) invites applications for a post-doctoral researcher in Data Science and Experimental Particle Physics.
The successful candidate will join the LIP Competence Center in Simulation and Big Data, contributing to expand the inhouse know-how in advanced data analysis techniques. He/she is expected to contribute to the development of one or more of the following research lines:

- machine learning for physics aware learning, object reconstruction and searches for new physics phenomena at the Large Hadron Collider;
- machine learning in the context of dark matter and rare event searches, as well as on astroparticle physics;
- application of machine learning techniques used in High Energy Physics to the industrial context.

The focus of the present position is on machine learning and processing of large volumes of data and thus no prior experience in High Energy Physics is required. It is crucial, however, that the candidate demonstrates the ability to adapt to the challenging conditions of competitive international collaborations.
A PhD, or equivalent, in high energy physics, data science or related fields is required at time of application. Candidates should have previous experience on the development, testing and application of deep neural networks and/or other multivariate techniques for classification and regression problems. Computing skills in C++/Python programming languages, as well as in Scikit-learn, Keras, Theano, Tensorflow or other data analysis and processing packages will be favourably considered.
The initial contract will be for six months, renewable for up to a maximum of three years. Expected start date is March 2019. Workplace will be at one of LIP's nodes (Lisboa, Braga, Coimbra) in Portugal.
Applications, including: (a) motivation letter addressed to the President of LIP, (b) detailed Curriculum Vitae, (c) certificate or diploma copy, (d) a maximum of three recommendation letters, to be requested by the candidate and sent directly by the authors to natalia@lip.pt, mentioning explicitly the applicant name and this call, (d) other documentation relevant for the evaluation of qualifications in a related scientific area; should be sent in PDF format to natalia@lip.pt by 28th February 2019.

Further particular can be found at http://www.eracareers.pt/opportunities/index.aspx?task=showAnuncioOportunities&jobId=109259&lang=en

For informal enquiries, please contact nfcastro@lip.pt or gmilhano@lip.pt.