

Offre d'emploi : Ingénieur Electronicien Job offer : Electronics Engineer

CDI / Permanent position IRFU, CEA Paris-Saclay, FRANCE

The Institute of Research in the Fundamental laws of the Universe, IRFU, CEA Paris-Saclay, is an internationally recognized actor in the fields of high energy physics, nuclear physics, astroparticles and astrophysics. In order to reinforce its team working on the Phase II upgrade of the ATLAS particle physics experiment at CERN, the institute seeks an engineer in electronics for a **permanent position** based at Saclay, France.

Description

Within the laboratory of real time systems, data acquisition and microelectronics, you will initially join the local team in charge of contributing to the upgrade of the readout electronics of the calorimeter of the ATLAS particle physics experiment. Your first mission will be to:

- Participate to the development of the above new readout system which is based on an electronic board called "Liquid-Argon Signal Processor – LASP". This digital board, in ATCA form factor, houses state-of-the-art FPGA's and comprises numerous high speed serial links (10-25 Gbps),
- Contribute to the architecture, hardware, software and firmware development of the characterization test bench and the industrial production test bench of the LASP board,
- Interact daily with the members of the local project team and communicate regularly with external collaborators.

Travel to CERN (Geneva) for collaboration meetings and occasional travel in France and elsewhere are foreseen. Local communication normally takes place in French while English is used within the collaboration. Proficiency in English is mandatory while a sufficient knowledge of French would be a plus for non-native speakers.

Profile

- You hold an engineering degree (or superior) with specialization in electronics or you can justify of a solid experience in electronics,
- You have from 0 to 5 years (or more) of experience in the field of digital electronics,
- You have competences in digital board design, debug, characterization and testing. Experience in the ATCA standard would be a plus,
- You are familiar with hardware description languages (VHDL and/or Verilog) and FPGA programming and you have skills in system design, firmware/software development and validation,
- You work efficiently in a team, are curious and rigorous,
- You are willing to contribute to a leading international large scale experimental physics project and solving the technical challenges of advanced instrumentation for science is one of your motivations.

Online application: Job Offer N°19094