



The **ATLAS group** at the « Institut de Recherche des lois Fondamentales de l'Univers » (IRFU, Université Paris-Saclay) is seeking highly qualified and motivated individual for

A Postdoctoral research position (f/m)

to contribute to the upgrade program of the Liquid Argon calorimeter of the ATLAS detector at the LHC. In addition to a participation to physics analysis in the domain of the top quark, the successful candidate is expected to cover research areas on back-end (off-detector aspects) or Front-End (on-detector related electronics):

- Evaluation of ADC options for the upgraded Front-End boards (FEB2). This evaluation has to be pursued on test-bench, in electronics simulation, and physics simulation. The candidate is expected to cover physics simulation and also to participate to test-bench and electronics activities.
- Development of back-end firmware and algorithms.
- Measurement and search in the four-top final state in the LHC Run-2 data, and preparation of the analysis for Phase-1 Run 3.

IRFU Saclay has contributed to the construction of the Liquid Argon Calorimeter and is strongly involved in both Phase 1 upgrade (for data taking starting in 2021) and Phase 2 upgrade (for the HL-LHC phase starting in 2026) programs of the ATLAS detector. The IRFU Atlas group has also been involved in measuring the top quark properties since several years.

The position can start as soon as February 2019 for 2 years and is meant to be based at the IRFU institute, part of the new Paris-Saclay University near Paris, with regular travels to CERN.

Candidates should have a Ph.D. in experimental particle physics by the time of appointment. They should send by November 15, a curriculum vitae, list of publications, statement of research interests, list of scientific references, and at least two letters of recommendation.

The applications should be sent via email to Claude Guyot (claude.guyot@cea.fr).

Field of interest: hep-ex

Experiment: CERN-LHC-ATLAS

Deadline: November 15, 2018

Contact: Claude Guyot

Email: Claude.guyot@cea.fr

Letters of Reference should be sent to: claude.guyot@cea.fr