



Anncyy, May 17th, 2018

Post-doctoral Research Associate position on Higgs to diphotons in ATLAS at LAPP-Anncyy

Job description

LAPP-Anncyy is opening a **two-year post-doc position on ATLAS** in the diphoton analysis group. The position can begin as soon as **October 1st 2018**, and will focus on the **measurement of the Standard Model Higgs boson properties in the diphoton decay channel**.

The *Laboratoire d'Anncyy de Physique des Particules* (LAPP) is a high energy physics, astro-particle and neutrino physics laboratory located in Anncyy-le-Vieux, with a staff of about 150 physicists, engineers and technicians. It is a mixed research unit of the CNRS/IN2P3 and of the *l'Université Savoie Mont-Blanc*. The ATLAS LAPP group is currently composed by 13 permanent physicists, 6 post-doctoral research associates, 6 PhD students and 20 engineers and technicians. The group physics interests range from Higgs physics to SM precision measurements to direct searches for New Physics at the LHC. We have a historical commitment to the ATLAS LAr calorimeter operations, maintenance and upgrades, and to other activities ranging from EGamma performances to trigger to the ATLAS ITK upgrade. The geographical proximity of LAPP and CERN, about 50 km and 35' drive, allow the group members a strong involvement in both the data taking and detector operation, and the continuous participation in person to the working meetings of the ATLAS Higgs Group.

The successful candidate is expected to take a leading role in the activity of the diphoton analysis team, focusing on the measurement of the SM Higgs boson properties (i.e. **precision measurement of the Higgs couplings and Simplified Template Cross Sections (STXS) and their Effective Field Theory interpretation in the $H \rightarrow \gamma\gamma$ channel**), as well as on photon performance improvements that would benefit this analysis (e.g. **calibration of the photon energy scale and resolution**).

The candidate could be based either at LAPP or at CERN, with frequent commuting to the other lab when needed.



Requirements

Candidates should have a PhD in experimental high-energy physics by the date of appointment.

How to apply

Applicants should send a curriculum vitae, a list of their most relevant publications, a brief statement of research interests and arrange to have at least three letters of recommendation sent to Marco Delmastro (marco.delmastro@lapp.in2p3.fr)

Starting date

The position can start as soon as **October 1st, 2018**.

Deadline

Applications received by **June 30th 2018** will receive full consideration.
The call will remain open until filled.

More information

The position is funded by the French ANR (*Agence Nationale de la Recherche*) through the **PhotonPortal** grant, a joint project between LAPP-Annecy, LAL-Orsay and LPNHE-Paris (<http://lappweb.in2p3.fr/photonportal/>). Enquiry on the **PhotonPortal** project can be made to Marco Delmastro (marco.delmastro@lapp.in2p3.fr).