

# **Postdoctoral Fellowships**

Marie Skłodowska-Curie Actions Developing talents, advancing research



#### **CALL FOR APPLICATIONS 2025 - FELLOWS**

**Supervisor** Reina Camacho Toro

Supervisor page <a href="https://camachoreina.github.io/">https://camachoreina.github.io/</a>

Host Institution Centre National de la Recherche Scientifique (CNRS)

https://www.cnrs.fr/en

Research Lab

Laboratoire de physique nucléaire et de hautes énergies

https://lpnhe.in2p3.fr/

Research Team ATLAS

http://lpnhe.in2p3.fr/spip.php?rubrique7

## **Project Title**

Testing the electroweak symmetry breaking mechanism with di-Higgs production studies on the ATLAS experiment at the Large Hadron Collider (LHC)

#### **Project Description**

The candidate will be a key member of the ATLAS group at the LPNHE in Paris, which has a diverse experimental particle physics program. The main topic proposed relates to Higgs boson and electroweak physics, focused on di-Higgs production studies, the foundation of the electroweak symmetry breaking mechanism in the Standard Model. Possibility of contributing to High-Luminosity LHC detector upgrade projects or Future Circular Collider (FCC) studies as well if the candidate is interested.

### **Keywords**

experimental particle physics, large hadron collider, di-Higgs production

#### **Description of the Host Research Lab**

The LPNHE is involved in several major experimental programs, international collaborations with the world's leading research facilities around the world, including particle accelerator centers. These programs cover current issues in particle physics, astroparticles and cosmology.