

# **Postdoctoral Fellowships**

Marie Skłodowska-Curie Actions Developing talents, advancing research



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

Supervisor Giovanni Calderini

**Supervisor page** <a href="https://scholar.google.it/citations?user=1HdfiUQAAAAJ&hl=en">https://scholar.google.it/citations?user=1HdfiUQAAAAJ&hl=en</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**

Development of silicon pixel sensors with internal charge multiplication for traking applications in High Energy Physics

#### **Project Description**

Tracking in High Energy Physics requires space and timing information to resolve trajectories in dense environment. With respect to traditional pixel position detectors, timing information at the level of tens of ps requires charge multiplication inside the device. We are developing Low Gain Avalanche Detectors and CMOS devices with internal multiplication which will provide 4D tracking for experiments at future colliders (LHC upgrade at CERN, Future Circular Collider).

## **Keywords**

semiconductor detectors, tracking detectors, radiation detectors

#### **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 gas pedal centers and observatories. These programs cover current issues in particle physics, astroparticles and cosmology.