

# **Postdoctoral Fellowships**

Marie Skłodowska-Curie Actions Developing talents, advancing research



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

**Supervisor** Pauline Zarrouk

Supervisor page <a href="https://www.researchgate.net/profile/Pauline-Zarrouk">https://www.researchgate.net/profile/Pauline-Zarrouk</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 Dark Energy Spectroscopic Instrument

https://lpnhe.in2p3.fr/spip.php?rubrique335

## **Project Title**

Unveil the dark sector with beyond standard galaxy clustering analysis using DESI

### **Project Description**

Within the DESI (Dark Energy Spectroscopic Instrument) collaboration, we have revealed new constraints on the nature of dark energy with, for the first time, promising hints for a dynamical dark energy instead of the usual cosmological constant that we assume in the most simple model. This subject aims at developing beyond standard techniques with an application to DESI real data in order to improve the precision on the cosmological parameters of interest by at least a factor 2-5.

#### Keywords

cosmology, dark energy, beyond standard techniques

### **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.

To submit your application, please send an email with the required documents to  $\underline{\text{msca-pf@sorbonne-universite.fr}}$