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Marie Skłodowska-Curie Actions

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Postdoctoral Fellowships



CALL FOR APPLICATIONS 2025 – FELLOWS

Supervisor	Luca Scotto Lavina
Supervisor page	https://annuaire.in2p3.fr/4964-5386/luca-scotto%20lavina
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	XENON https://xenonexperiment.org/

Project Title

Development of new electrodes for next generation dual phase xenon Time Projection Chamber (TPC) experiments for Dark Matter direct detection

Project Description

The current technology of electrodes, used in dual phase xenon TPC experiments, is not adapted to increase in size needed for future detectors. To test new concepts, a reduced size xenon TPC, named XeLab, has been built in LPNHE and is starting to be operated. The project consists in designing, producing and testing in XeLab next generation electrodes, with spacers to maintain a constant inter-electrode distance despite intense electric fields.

Keywords

dark matter direct detection, dual phase xenon Time Projection Chamber, electrodes

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 particle accelerator centers. These programs cover current issues in particle physics, astroparticles and cosmology.

To submit your application, please send an email with the required documents to
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