



Postdoctoral Fellowships

MSCA

Marie Skłodowska-Curie Actions

*Developing talents,
advancing research*



CALL FOR APPLICATIONS 2025 – FELLOWS

Supervisor	Jean-Louis Cantin
Supervisor page	https://www.researchgate.net/scientific-contributions/J-L-Cantin-30340931
Host Institution	Sorbonne Université https://www.sorbonne-universite.fr/en
Research Lab	Institute of NanoSciences of Paris https://w3.insp.upmc.fr/en/insp-en/
Research Team	Nanometric Thin Films: formation, interfaces, defects https://w3.insp.upmc.fr/en/research/research-teams/nanometric-thin-films-formation-interfaces-and-defects/

Project Title

Quantum information and sensing : defects as assets

Project Description

Quantum information and sensing can be realized by using spin states of point defects in semiconductors. Electron Spin Resonance allows the identification and manipulation of electronic spin of isolated defects and will be applied to study new systems capable to act as quantum bits, in silicon carbide and related materials. Optically or electrically detected spin resonance can be promoted during the fellowship. Experience in optics, magnetic resonance and programming is highly welcome.

Keywords

magnetic resonance, quantum bit, semiconductor

Description of the Host Research Lab

The Institute of NanoSciences of Paris (INSP) brings together teams from four condensed matter physics laboratories. Its scientific objectives are at the heart of fundamental research in nanosciences, but it also has a wide range of applications: optoelectronics and telecommunications, earth sciences and the environment, catalysis and medical diagnostics.

To submit your application, please send an email with the required documents to
msca-pf@sorbonne-universite.fr