



MSCA

Marie Skłodowska-Curie Actions

*Developing talents,
advancing research*

Postdoctoral Fellowships



CALL FOR APPLICATIONS 2025 – FELLOWS

Supervisor	Maxime Deforet
Supervisor page	https://www.labojeanperrin.fr/?mdeforet
Host Institution	Sorbonne Université https://www.sorbonne-universite.fr/en
Research Lab	Laboratoire Jean Perrin https://www.labojeanperrin.fr/?lang=en
Research Team	Physics of bacterial colony spreading https://www.labojeanperrin.fr/?article29

Project Title

Active flows in proliferating active matter

Project Description

The project focuses on the experimental study of active matter systems where proliferation and self-propulsion of living objects drive large-scale flows. The candidate will explore bacterial systems, focusing on self-organization and dynamic instabilities in bacterial suspensions and colonies, including phase separation and competition dynamics between mixed populations with varying motility, combining microscopy, image analysis, and theoretical modelling in collaboration with theorists.

Keywords

active matter, bacteria, motility

Description of the Host Research Lab

LJP research activities consist in Physics at the interface of with Biology and Medicine. We develop new experimental approaches to probe complex biological systems at different scales, and we develop bio-inspired systems to develop new concepts or to improve our understanding of given biological mechanisms. A large part of our research aims at exploring the response of a biological system to external perturbations. Finally, the LJP includes a theoretical component closely interacting with experimenters.

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