POST-DOC POSITION INSP
> January 2026

Controlling skyrmions with surface acoustic waves

LOCATION:
Institut des Nanosciences de Paris
(Sorbonne Université), France
Dates: >January 2026, for 18 months

APPLICATION
<PhD +max 2 years at the date of hire.
Please contact us ! thevenard@insp.jussieu.fr
Open until position filled
Monthly Salary: ~2500€

JOB DESCRIPTION

This project aims to use the **magnetostrictive properties of skyrmrion-hosting thin films to control the nucleation, propagation and annihilation of these compact spin textures with surface acoustic waves** (SAWs), which are coherent strain waves. Exploiting this potentially resonant coupling, we are aiming to propose new spintronics devices combining the wave mechanics allowed by the weakly damped SAWs, with the field and frequency sensitivity of skyrmions. We are looking for a highly motivated Postdoctoral fellow to contribute to this project which has a strong experimental component.

SPECIFICALLY YOU WILL BE EXPECTED TO LEAD/PARTICIPATE IN THE FOLLOWING:

- implementation of a hyper-frequency SAW set-up : knowledge of LabView or Python interfacing and/or rf electronics desired
- experiment design, optimization
- Optimization of the SAW generation design
- Static and time-resolved Kerr effect

CONTEXT:

This post-doc position is part of a **4-year ANR (Agence Nationale de la Recherche) ACOUSKYR project**, in collaboration with LAF, SPINTEC, IJL, C2N and LSPM laboratories.

The INSP is located at the centre of Paris on the largest campus of the country and has about 170 people working on a broad array of fields related to nanosciences: acoustics, spintronics, superconductivity, quantum optics, growth (MBE) etc. – http://www.insp.jussieu.fr/.

Our team has developed an expertise in magnetoacoustics on various systems, take a look at our webpage:
https://w3.insp.upmc.fr/en/research/research-teams/nanostructures-growth-quantum-effects-and-magnetism/spins-and-magnetism-magneto-acoustics/