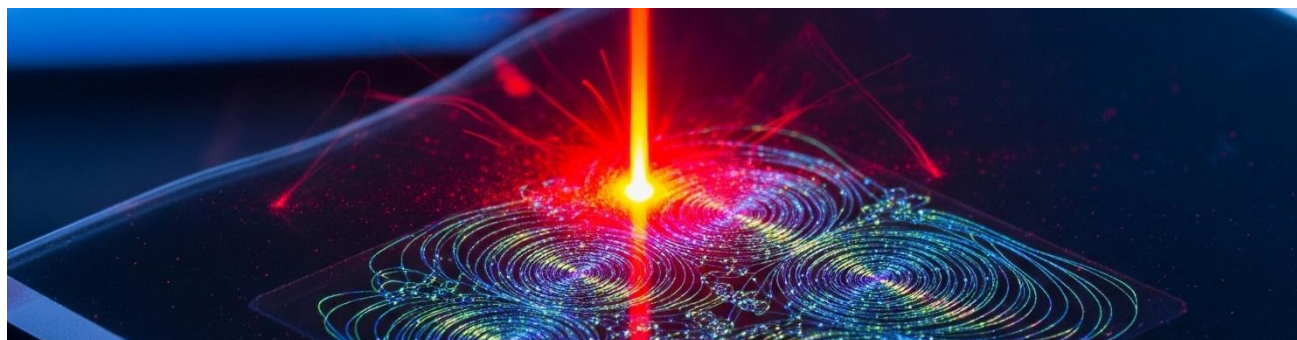


PhD Fellowship opportunity - Towards Light-Induced Spin Textures

 **IMPORTANT:** Only for EU citizens AND applicants with a Spanish residence permit.



We're seeking a new candidate for a groundbreaking research project exploring the feasibility of **optical manipulation of spatial magnetization in two-dimensional (2D) materials**. The goal is to explore the **imprint of spin textures or introduce new mechanisms for spin waves using structured light**. This project combines advanced theoretical modeling and a strong foundation in ultrafast light-matter interactions, laying the groundwork for future opto-spintronic technologies.

WHERE? At the **ICMM-CSIC, Madrid**, a newly awarded **Severo Ochoa Centre of Excellence** boasting world-class facilities and advanced nanofabrication capabilities. This project actively fosters interdisciplinary collaboration.

WHEN? Planned start date: **Late 2025 / Early 2026**

WHO? Supervised by a team with complementary expertise in:

- **Quantum Dynamics of Materials (QUDYMA):** Specializing in light-matter interactions.
- **Nanomagnetism and Magnetization Processes Group:** Experts in nanoscale magnetic modeling.

REQUIREMENTS:

- Master's degree in Physics, Nanotechnology, Materials Science, or a related field (≥ 300 ECTS).
- Strong background in condensed matter theory, many-body theory, or optics.
- Interest in high-performance computing (HPC) simulations and magnetization dynamics.
- **Essential: EU citizenship or Spanish residence permit.**

CONDITIONS:

- Full-time PhD contract (up to 4 years) with increase up to ~€2,029/month beyond 3rd year.
- ~€6,860 available for PhD tuition and international research stays.
- Comprehensive training in condensed-matter theory, many-body theory, and advanced HPC programming, including a career development plan and a planned 3-month research stay abroad.

APPLY NOW!

Send applications and short CV by email jose@icmm.csic.es & antonio.picon@csic.es. **Deadline until the position is filled. Strict deadlines apply!**