Permanent Researcher Position in Condensed Matter Theory & Modelling at SPEC (CEA Saclay)

The Modelling & Theory Group (GMT) at SPEC is seeking a permanent researcher in the area of condensed matter theory, with a focus on numerical methods in nano- to mesoscopic quantum physics.

About the Laboratory & team

SPEC is a joint CEA-CNRS research unit with about 160 staff members (permanent and non-permanent), conducting multidisciplinary research on condensed matter physics, from quantum physics to soft and active matter. The GMT group is composed of four permanent researchers and roughly as many PhDs and post-docs. Its research themes combine theory and modeling to investigate electronic, magnetic, and transport properties at the nano and meso scale with a focus on nanostructures, 2D materials, metal/organic interfaces, and topological insulators. A defining feature of GMT is its close collaboration with experimental teams, driving research that is both fundamentally motivated and aimed at predicting novel phenomena and materials. The group wishes now to reinforce the link between meso and nano scale research.

Job description

GMT group at SPEC is looking for a highly motivated researcher to synergize with the existing theoretical team while fostering partnerships with experimental groups of SPEC and more broadly with Université Paris-Saclay.

Job profile:

- Researcher in theoretical/computational condensed matter physics.
- Strong proficiency in programming and genuine interest for numerical methods
- Solid background in quantum transport and experience with novel quantum materials—such as topological matter, 2D materials, or hybrid conductors
- Human qualities are paramount: we value candidates who demonstrate excellent interpersonal skills and a commitment to collaborative research.
- The ideal candidate will thrive in a team of theoreticians, building strong working relationships with the permanent staff, actively contributing to on-going theory-experiment collaborations, and supporting PhD students.
- Initiative in developing new projects and securing external funding is highly encouraged.
- Additional expertise in quantum information theory will be considered an asset.

Application Requirements:

Interested candidates should apply on the dedicated CEA job website together with sending their application to cyrille.barreteau@cea.fr. The application should include the following documents in PDF format:

- A curriculum vitae.
- A complete list of publications.
- Motivation letter.
- 3 recommendation letters or a list of references.
- Short scientific project.

Based on the applications received, a shortlist of candidates will be drawn up for an interview by an advisory selection committee.

Application deadline: 31/05/2026

Job availability: 01/12/2026