



DIPC  
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## PhD Position (theory) Spin-Orbit Photonics and Quantum Applications

We announce the opening of a PhD position in the Donostia International Physics Center (DIPC), Donostia-San Sebastian, Spain. We offer a three-year fully funded contract. Review of the applications will begin after February 19th, 2017 and will continue until the position is filled. Early submissions are appreciated. The start date would be as early as possible.

This PhD project addresses theoretical questions at the joint frontier fields of Spin-Orbit Photonics and Quantum Optics, in particular concerning topological and quantum properties of light- and spin-transport in photonic nanostructures.

Candidates are expected to have a good working knowledge of electrodynamics and quantum mechanics, in addition to a good command of English. The successful applicant will be introduced to a range of analytical and numerical techniques necessary to address the classical and quantum phenomena in question. The PhD student will be part of the DIPC research community and have the chance to profit from the interaction with a diverse staff and renowned visiting scientists.

The research will be carried out within the project “Spin-Orbit Photonics and Quantum Applications (SOPhoQua)” funded by the *Departamento de educación, política lingüística, y cultura de Gobierno Vasco* (equivalent of Ministry of Education of the Autonomous Region of the Basque Country). The degree will be awarded by the University of the Basque Country (UPV/EHU).

Applications, including a CV and statement of interest, should be sent to: [juanjo.saenz@dipc.org](mailto:juanjo.saenz@dipc.org). For further information, do not hesitate to contact any of the project coordinators Juan Jose Saenz, Geza Giedke, Dario Bercioux, Aitzol Garcia-Etxarri at [name.surname@dipc.org](mailto:name.surname@dipc.org)

Applications will be evaluated by an evaluation committee on the basis of four criteria: CV of the candidate (60%); adequacy of the candidate’s scientific background to the project (20%); statement of interest and reference letters (10%); and others: diversity in gender, race, nationality, etc. (10%).

Evaluation results will be communicated to the candidates soon after. The position will only be filled if a qualified candidate is found.

**About DIPC:** Founded in 1999 as a joint initiative between the University of the Basque Country (UPV/EHU), the Basque Government and private sponsors researcher, DIPC conducts basic research in materials science and solid-state physics and is now pursuing research lines on electronic properties at the nanoscale, surface physics, photonics and quantum optics, and soft-matter physics.

It is situated on the Ibaeta Campus of UPV in a lively scientific and student environment. The institute is at a walking distance from CIC Nanogune and the material physics center (CFM-MPC) of the Spanish research council (CSIC), and all three centers are strongly connected by many and deep collaborations and profit from the synergies between them.