

CALL FOR APPLICATIONS - April 2023

Research Assistant Position

Donostia International Physics Center (DIPC) is currently accepting applications for Research Assistant positions. This is a unique opportunity for highly motivated students, recently graduated from the University in Physics or related fields, to gain research experience in one of DIPC's high-profile research teams. A description of each of the available openings, contact information and deadlines can be found on the following pages.

Although candidates are welcome to contact the project supervisors to know further details about the proposed research activity, please be aware that the application will be evaluated only if it is submitted directly to the email address listed as "application email".

Applications received by the deadline will be evaluated by a Committee designed by the DIPC board on the basis of the following criteria:

- CV of the candidate (60%)
- Adequacy of the candidate's scientific background to the project (20%)
- Reference letters (10%)
- Other: Diversity in gender, race, nationality, etc. (10%)

Evaluation results will be communicated to the candidates soon after. Positions will only be filled if qualified candidates are found.

The DIPC may revoke its decision if the candidate fails to join by the appointed time, in which case the position will be awarded to the candidate with the next highest score, provided it is above 50 (out of 100).

However, the selected candidate may keep the position if, in the opinion of the Selection Committee, the candidate duly justifies the reasons why he or she cannot join before the specified deadline, and as long as the project allows it.

Ref. 2023/46 Spin qubits in moving quantum dots

Supervisor(s): Geza Giedke (geza.giedke@dipc.org)

Duration*: 1 year

Application Deadline: 13/04/2023

Application Email: jobs.research@dipc.org

Surface acoustic waves in piezoelectric materials can be used to trap and move single carriers in SAW waveguides and quantum wells. Combining them with spin qubits in static quantum dots adds new flexibility to this architecture.

The aim of this project is to develop numerical and analytical methods to investigate the manipulation, interaction, and decoherence of electron-spin qubits in static and moving quantum dots (QDs) and to exploit moving QDs for quantum information processing protocols.

Interested candidates should submit an updated CV and a brief statement of interest to the application email listed above. Reference letters are welcome but not indispensable. The reference of the specific opening to which the candidate is applying should also be stated in the subject line.

This project has received funding from the MCIN program "Severo Ochoa", under reference AEI/ CEX2018-000867-S

