



CALL FOR APPLICATIONS - August 2022

Senior Researcher Position

Donostia International Physics Center (DIPC) is currently accepting applications for Senior Researcher positions. 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 (40%)
- Adequacy of the candidate's scientific background to the project (40%)
- 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. 2022/55
Emergent Phenomena at Quantum Interfaces (EPQI)

Duration*: 3 years

Application Deadline: 12/08/2022

Application Email: jobs.research@dipc.org

The interfaces between different quantum materials represent a new research frontier as they may become fundamentally different from bulk, leading to completely new phases. The known examples are topological superconductivity and Quantum Anomalous Hall Effect that emerge when Topological Insulators are interfaced with superconductivity and magnetism. Both phenomena offer huge technological potential but occur only at extremely low temperatures.

The quantum interfaces offer an opportunity to both dramatically enhance the known quantum phenomena and to discover entirely new ones due to their extreme sensitivity to a broad spectrum of tuning parameters, including strain.

The goal of this experimental project is to explore new phenomena at quantum interfaces, synthesised and studied by spectroscopic and transport probes, while tuned by external uniaxial strain. The project will not be focused on a single material or a single phenomenon - it will include many interfaces in a search for entirely new phenomena - this will be its strength that will open a new era in material discovery.

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.