CALL FOR APPLICATIONS - January 2023

Post-doctoral Position

Donostia International Physics Center (DIPC) is currently accepting applications for Post-doctoral positions. This is a unique opportunity for junior researchers with a recent PhD degree in Physics or related fields to join 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 (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. 2023/03
Electronic Properties of Quantum Interfaces Studied in ARPES

Supervisor(s):
Tonica Valla (tonica.valla@dipc.org)

***Duration*:** *3 years*

Application Deadline: *21/01/2023* ***Application Email:*** *jobs.research@dipc.org*

We are seeking a postdoc to study electronic properties of novel quantum materials and their interfaces by using Angle Resolved Photoemission Spectroscopy (ARPES). These projects will also involve molecular beam epitaxy (MBE) synthesis and scanning tunnelling microscopy (STM). The ideal candidate should have ARPES experience while the experience in MBE synthesis of 2D materials and low-temperature STM would be advantageous.

Essential Duties and Responsibilities:

- The candidate will conduct the photoemission studies and contribute to the MBE synthesis efforts within the research program of the group.
- Will participate in the current research program on quantum materials and strongly correlated materials using in-lab and synchrotron-based ARPES facilities, including collaboration with other groups. The position will involve travel and possible extended stays at synchrotron facilities and collaborating institutions.

Required Knowledge, Skills and Abilities:

- PhD in experimental condensed matter physics or related field.
- An excellent understanding of the physics of strongly correlated materials and electronic properties of quantum materials is essential.
- Experience with ARPES.

Preferred Knowledge, Skills, and Abilities:

- Strong data analysis skills using Igor Pro, Matlab and/or Python.
- Proven abilities for disseminating research by writing papers and giving academic talks.
- Experience in designing and operating vacuum systems.
- Experience with MBE and/or STM.
- Enjoys teamwork and an interdisciplinary environment.

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.

***Openings with a duration of more than one year are for a 1-year contract, renewable based on performance and availability of funding.**