CALL FOR APPLICATIONS - July 2022

PhD Position

Donostia International Physics Center (DIPC) is currently accepting applications for PhD positions. This is a unique opportunity for highly motivated students, recently graduated from the university 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.

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

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. 2022/43
The cosmological evolution of Nuclear Star Clusters

Supervisor(s):
Silvia Bonoli (silvia.bonoli@dipc.org)

Duration*: *1 year*

Application Deadline: *21/07/2022* ***Application Email:*** *jobs.research@dipc.org*

The project will focus on the modelling of the formation and evolution of Nuclear Star Clusters across cosmic time.

Nuclear Star Clusters are compact clusters of stars located at the center of galaxies. Understanding their origin and evolution is essential to fully understand the evolution of the galaxies and their central structure. Moreover, NSCs can share the host galaxy's center with supermassive black holes. Understanding how NSCs and supermassive black holes interact can offer key insights on their dynamical co-evolution and what is expected by future experiments, such as the LISA mission.

The goal of the project is to use models for galaxy formation to study precisely how NSCs form and evolve within galaxies, and how they interact with supermassive black holes.

The selected student will have the opportunity to work with state-of-the-art codes and algorithms for modelling galaxy evolution and interact with the whole DIPC astrophysics group and collaborators, within and outside Spain.

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.