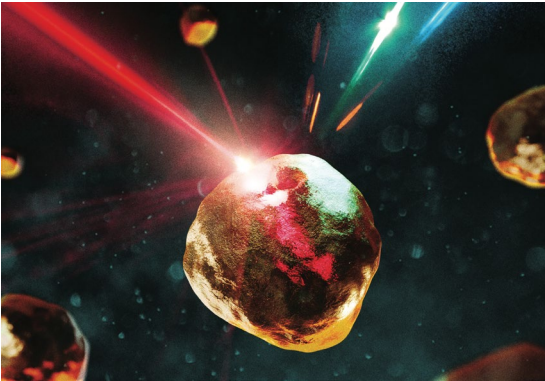


---

## **PhD position for the Project: [Quantum physics associated with the interaction of free electrons, light, and photonics nanostructures](#)**



The [Nanophotonics Theory](#) research group at ICFO, led by Prof. Dr. Javier Garcia de Abajo, is looking for well-qualified, highly motivated and dynamic young graduate students and scientists who wish to enhance his scientific career in a friendly, international and stimulating environment.

**The successful candidates will be part of a recently granted ERC project on quantum physics associated with the interaction of free electrons, light, and photonics nanostructures.** The project aims to study target quantum aspects of the interaction between free electrons and optical excitations confined within nanometer

scales in search of new phenomena at the intersection between quantum optics and microscopy with unprecedentedly improved resolution. Specifically, we aim to realize the grand goal of a combined attosecond-Ångström-meV resolution in time-space-energy. The project has a theoretical nature in collaboration with an extended network of experimental groups (see our list of publications at <http://www.nanophotonics.es>). A solid background in quantum and electromagnetic theory would be desirable.

### **Application procedure:**

The formal application should be submitted online via our currently open PhD Call: <https://jobs.icfo.eu/?detail=887>

Candidates may contact [jobs@icfo.eu](mailto:jobs@icfo.eu) for informal enquiries regarding the application, as well as address scientific enquiries to Prof. Dr. Javier Garcia de Abajo ([javier.garciadeabajo@icfo.eu](mailto:javier.garciadeabajo@icfo.eu)).

Deadline: June 12, 2024.