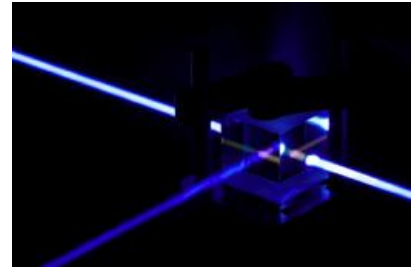


One PhD and one post-doctoral positions in Quantum Nanophotonics: Optical levitation of particles

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The Quantum Nanophotonics Laboratory at Donostia, in the Material Physics Center (San Sebastian, Spain) is looking for highly motivated, talented researchers searching exciting opportunities to obtain a PhD or to continue their research career as a postdoc in the area of Quantum Nanophotonics. The successful candidates will study both experimentally and theoretically the quantum dynamics of levitated particles. In particular, the successful candidate(s) will investigate the use of these systems as magnetic and inertial sensors. The Quantum Nanophotonics group at MPC is collaborating with renowned international research groups and companies to control the quantum properties of small material particles.

There are one PhD and one post-doctoral positions available in this research line. The interested candidates should send an email to gabriel.molina.terriza@gmail.com attaching a full CV, a transcript of the Masters grades and a cover letter, indicating in the Subject, “Application for PhD/Postdoc in QNano”. Applications not meeting these requirements won’t be considered.

About [San Sebastian](#): San Sebastian is a small city on the Northern Spanish coast. Close to the border with France, this city enjoys a privileged location for mountain climbing, skiing and surfing. It hosts a diverse and vibrant set of cultural activities, including an international film festival. San Sebastian is an active node for research in bio and nanophotonics with four internationally renowned centres: [Biomagune](#), [Nanogune](#), the [Donostia International Physics Center](#) and the [Materials Physics Center](#).

Selected publications from the group:

- [1] Quantum control of photonic entanglement with a single sub-wavelength structure, [arXiv:1611.00104](#)
- [2] Measurement and shaping of biphoton spectral wavefunctions, [Phys. Rev. Lett.](#) [arXiv:1503.08629](#)
- [3] Observation of cooperatively enhanced atomic dipole forces from NV centers in optically trapped nanodiamonds, [Nature Physics](#), [arXiv:1511.04665](#)
- [4] Angular momentum-induced circular dichroism in non-chiral nanostructures [Nature Communications](#)
- [5] Twisted Photons [Nature Physics](#)