Post-doctoral position in Quantum optics of single atoms interacting with single photons

Mon, 2019-10-14 10:01 - ICFO - The Institute of Photonic Sciences [1] **At:** ICFO – The Institute of Photonic Sciences
Deadline: 31 January, 2020

Location

Avenue Carl Friedrich Gauss, 3
Castelldefels 08860 Spain

Post-doctoral position in Quantum optics of single atoms interacting with single photons

DESCRIPTION

ICFO-The Institute of Photonic Sciences is offering a postdoctoral position to a well-qualified, highly motivated and dynamic young scientist who wishes to enhance his/her scientific career in a friendly and stimulating environment.

The successful candidate will be joining **Atomic Quantum Optics group** led by **Prof. Dr. Morgan Mitchell**. Building on many years of experience with cold atoms and non-classical light sources, we are developing an experiment to study the interaction of heralded single photons and entangled photon pairs from cavity-enhanced SPDC with individual rubidium atoms trapped at the focus of a high-NA lens. The experiment aims to study for the first time fundamental light-matter interaction processes at the single-particle level. We are looking for a post-doctoral researcher to lead this activity, building upon a running system that is currently capable of trapping and detecting single rubidium atoms and generation of single-photons and entangled pairs tunable anywhere within the rubidium D1 line.

ELIGIBILITY AND CONDITIONS

Candidates must hold an internationally-recognized Ph.D.-equivalent degree (or evidence of its completion in the nearest future) preferably in in experimental atomic physics, quantum optics, or related fields.

The candidate should have a proven track record of ability to lead a small team of PhD and Master students, coordinate interactions with theory collaborators.

ICFO is an equal opportunity employer. Candidates are selected exclusively on merit and potential on the basis of submitted application material. No restrictions related to disabilities, citizenship or gender apply to ICFO positions. ICFO abides by the principles of openness, efficiency, transparency, supportiveness, and international comparability as stated in the European Charter for Researchers and the European Code of Conduct for the Recruitment of Researchers.

The contract is offered for periods of one year, renewable.

APPLICATION PROCEDURE

The formal application should be submitted online via http://jobs.icfo.eu/?detail=409 [2]

Suitable candidates are requested to submit:

- Presentation letter with a declaration of interest,

- Curriculum Vitae, including contact details,

- Scanned copies of the complete (Bachelor and Master equivalent) official academic transcripts in English or Spanish,

- The contact e-mail of two potential referees.

Candidates may contact jobs [at] icfo [dot] eu for informal enquiries regarding the application, as well as address scientific enquiries to morgan [dot] mitchell [at] icfo [dot] eu

For updated information about ICFO, please visit http://www.icfo.eu [3]

- Postdoc [4]

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