

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

Wed, 2019-01-30 14:05 - [ICFO - The Institute of Photonic Sciences](#) [1] **At:** ICFO-The Institute of Photonic Sciences

Deadline: 15 March, 2019

Location

Avenue Carl Friedrich Gauss, 3
Castelldefels 08860 Spain

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 the **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 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.

No restrictions of citizenship apply to the ICFO post-doctoral contracts.

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

APPLICATION PROCEDURE

The formal application should be submitted online via <http://jobs.icfo.eu> [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,

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

Published on QUROPE (<http://qurope.eu>)

- The contact e-mail of two potential referees.

Candidates should be willing to be contacted by phone during the selection process. Candidates may contact [jobs \[at\] icfo \[dot\] eu](mailto:jobs@icfo.eu) for informal enquiries regarding the application, as well as address scientific enquiries to [morgan \[dot\] mitchell \[at\] icfo \[dot\] eu](mailto:morgan.mitchell@icfo.eu). For updated information about ICFO, please visit <http://www.icfo.eu/> [3]

DEADLINE

2019-03-15

- [Postdoc](#) [4]

Source URL:

<http://qurope.eu/db/jobs/post-doctoral-position-quantum-optics-single-atoms-interacting-single-photons>

Links:

[1] <http://qurope.eu/users/icfojobs>

[2] <http://jobs.icfo.eu>

[3] <http://www.icfo.eu/>

[4] <http://qurope.eu/db/jobs/type/postdoc>