

Post-doctoral position in ultracold quantum gases

Fri, 2019-01-11 14:52 - [ICFO - The Institute of Photonic Sciences](#) [1] **At:** ICFO- The Institute of Photonic Sciences

Deadline: 28 February, 2019

Location

Avenue Carl Friedrich Gauss, 3
Castelldefels Spain

ICFO is offering a postdoctoral position in experimental AMO physics 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 **Ultracold Quantum Gases group**, led by **Prof. Dr. Leticia Tarruell**. The research will focus on two-component Bose-Einstein condensates with tunable interactions. When these interactions compete such that the total mean-field energy practically cancels out, beyond mean-field effects dominate the behaviour of the system. We recently demonstrated the formation of self-bound liquid droplets stabilized by quantum fluctuations in this setting [Cabrera et al. Science 2018, Cheiney et al., PRL 2018], and plan to pursue this research direction in lower dimensions. We are also interested in exploring the combination of tunable interactions and a coherent coupling between the two components to generate density-dependent gauge fields.

For more details on our group and our research, consult www.qge.icfo.es [2]

Eligibility and Conditions

Candidates must hold an internationally-recognized Ph.D.-equivalent degree (or evidence of its completion in the nearest future) preferably in the field of ultracold atoms/ions or quantum optics.

We are looking for excellent and highly motivated candidates with a good background in both AMO and condensed-matter physics.

We provide access to excellent technical facilities and the possibility to work in a stimulating theoretical environment.

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

The contract is offered for periods of one year, renewable for a total of up to 2 years.

Application procedure

The formal application should be submitted online via <http://jobs.icfo.eu> [3]

Suitable candidates are requested to submit:

- Presentation letter with a declaration of interest,
- Curriculum Vitae, including contact details,
- The contact e-mail of two potential referees.

Candidates should be willing to be contacted by phone during the selection process.

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

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 [leticia \[dot\] tarruell \[at\] icfo \[dot\] eu](mailto:leticia.tarruell@icfo.eu)

For updated information about ICFO, please visit <http://www.icfo.eu/> [4]

- [Postdoc](#) [5]

Source URL: <http://qurope.eu/db/jobs/post-doctoral-position-ultracold-quantum-gases>

Links:

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