

## Opening of an experimental postdoc position in ultracold quantum gases at ICFO, Barcelona

The Ultracold Quantum Gases group, led by Leticia Tarruell, is inviting applications for one postdoctoral position in experimental AMO physics.

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](http://www.qge.icfo.es)

We are looking for excellent and highly motivated candidates with a good background in both AMO and condensed-matter physics. A PhD in the field of ultracold atoms/ions or quantum optics is required. We provide access to excellent technical facilities and the possibility to work in a stimulating theoretical environment.

To apply, please send your CV and the name of two people who could provide letters of recommendation to Leticia Tarruell: [leticia.tarruell@icfo.es](mailto:leticia.tarruell@icfo.es)

We aim at filling this position during 2019, but are flexible with the starting date. However, we encourage you to send an expression of interest or a full application as soon as possible.