

PhD positions in quantum networks with trapped ions

Mon, 2015-04-27 11:22 - [Matthias Keller](#) [1] **At:** University of Sussex, Brighton BN1 9RH
Deadline: 1 June, 2015

Location

University of Sussex Pevensey 2
Brighton BN1 9QH United Kingdom
50° 51' 54.8244" N, 0° 5' 13.632" W
See map: [Google Maps](#) [2]

Two 3.5 year PhD positions are available in the Ion Trap Cavity-QED and Molecular Physics Group in the Department of Physics & Astronomy at the University of Sussex.

The position comes with an annual stipend of £ £13,863 which can be supplemented by tutoring. The position includes a yearly travel allowance.

Applicants should have an undergraduate degree in physics.

Application deadline: Please apply preferentially by 1st July 2015.

Applications are invited for two PhD studentships in Experimental Networked Quantum Information Technologies at the University of Sussex. The appointment is within the framework of the EPSRC Quantum Technology Hub: Networked Quantum Information Technologies. The successful candidate will work in a team of experienced researchers directed by Dr Matthias Keller.

The goal of the project is to combine two of the most successful techniques in quantum information processing, individually trapped ions and strong-coupling cavity-QED, and use them as tools to set up a distributed quantum network. The principal challenge in the implementation of this scheme is the requirement for miniature-size traps and microscopic optical cavities to provide suitable conditions for a high-fidelity interface between ions and photons. In the project, technologies are developed to demonstrate distributed quantum information processing in a model system. This includes novel ion traps, laser sources and high-finesse optical cavities.

- [PhD](#) [3]

Source URL: <http://qurope.eu/db/jobs/phd-positions-quantum-networks-trapped-ions>

Links:

[1] <http://qurope.eu/users/matthias-keller>

[2] <http://maps.google.co.uk?q=Pevensey+2%2C+Brighton%2C+BN1+9QH%2C+uk>

[3] <http://qurope.eu/db/jobs/type/phd>