Ph.D./Master Position in Experimental Physics

**Fiber Cavities For Light-Atom Interfaces**

Miniaturized optical cavities made up of high quality mirrors, fabricated directly on the fiber end facet, are efficient system for cavity QED experiments. The small mode volume and high efficiency of photon coupling from the atom into the cavity, makes them potential device for Quantum information technology modules.

**Fiber Cavity Research**

- Single or few Rb atoms are trapped at the centre of a high finesse Fiber Fabry-Perot cavity. Goal is to realize photon storage in the atomic internal state using enhanced light-atom interaction through the cavity.
- Developing new fiber cavities with high finesse and highest possible light coupling efficiency. Hence improving the system for fast, reliable and robust quantum information operation.

**Experience or Intense Interest Required in:**

- Quantum Optics and atomic physics.
- Working with lasers, fibers and precision optics.
- Electronics design and computer control of the devices.

**Further information/Contact**

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