Max-Planck-Institut für Quantenoptik Quantum Dynamics Division

## PhD Position Doktorandenstelle

## (Experimental Physics / Quantum Optics)



## Quantum information processing with single atoms and photons

Single atoms coupled to high-finesse optical cavities allow us to study light-matter interactions in the quantum regime. Full control over atoms and photons makes them ideal prototypes for quantum information science.

Your thesis work will involve many aspects of quantum optics and quantum information processing: quantum networks, quantum memories, remote entanglement, quantum state transfer, quantized light fields, optical resonators, laser cooling and trapping of atoms.

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