



## Quantum logic spectroscopy of (anti-)protons



Our group develops quantum logic spectroscopy techniques for single protons and antiprotons in Penning traps. We aim to use a single atomic ion to cool individual (anti-)protons to their motional ground state and use the laser-cooled atomic scalable ion to detect the state of a single sub-atomic particle. As part of that effort, we develop microfabricated Penning traps inspired by recent advances in the field of ion-trap quantum computing. Our effort is part of the BASE collaboration and of the SFB DQ-mat (Designed Quantum States of Matter). We offer the following position:

Postdoctoral research associate (m/f/d) on quantum logic spectroscopy of single (anti-)protons

You will be working on the implementation of quantum logic spectroscopy based on our recent demonstration of fast adiabatic transport and ground state.

Interested?
Please contact Prof. Dr. C. Ospelkaus:
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