

Quantum Gases and Spectroscopy Group Prof. Dr. Klaus Sengstock

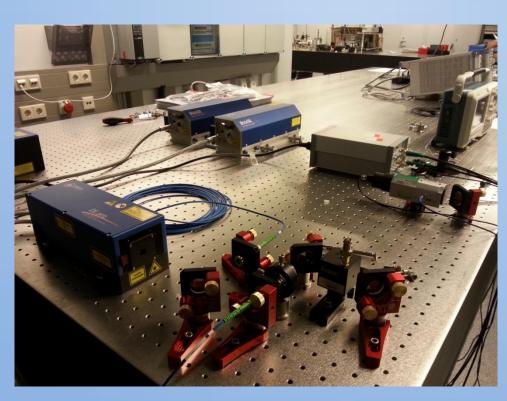
## **Bachelor Project**

Construction of a laser system for quantum gas experiments with lithium

In modern quantum gas experiments, atoms can be manipulated with high control using laser light. Of special importance is the near-resonant light, which is used for cooling and imaging the atoms.

In this Bachelor project, we want to build a laser system at 671 nm for experiments with lithium atoms. The project includes the design of the optical assembly and the alignment of the the light paths.

In addition, we want to construct a spectroscopy for locking the diode lasers to the right frequencies. For this, the laser beam is send through a vacuum chamber with a lithium oven.



Interested?

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