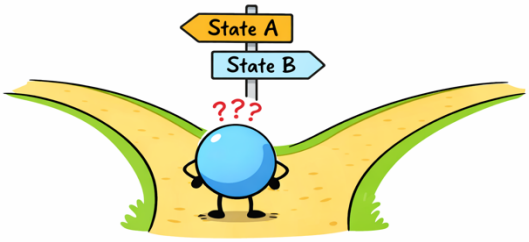
Master/Project/Bachelor Thesis in Quantum Many-Body Physics (German/English)

SCAN ME

Bistabilities occur in open quantum systems. As the name suggests, this phenomenon refers to the simultaneous **existence of two stable states** that are approached by the system for long times.

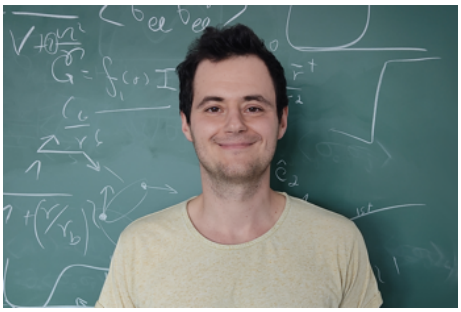


Bistabilities have so far not been measured for regularly arranged atoms. In collaboration with experimentalists from Munich, we want to change this. As part of the project, you will **model** a system consisting of **many atoms** in order to understand where to "look" in the experiment.

You will also learn the following things:

- How to model the interaction between atoms and light.
- What open quantum systems are and how to describe them.
- Why it is hard to solve a quantum many-body problem and how to do so in an approximative manner.

Progamming experience is required. We strive to increase the representation of women in our research group.



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