PHD POSITIONs

The project

The project aims to exploit the laws of thermodynamics and realize thermomachines at the ultimate limit of a single atom [1,2,3]. Utilizing state-of-the-art techniques in single-ion trapping and laser state manipulation, our previous experiments have demonstrated a full Otto-cycle heat engine using a single Calcium ion in a linear Paul trap [1]. This experiment opened a new realm for investigating thermodynamics at the single-atom level and in the quantum regime. Throughout this project we seek to provide experimental answers to many interesting questions when thermodynamics meet the quantum world.


Your profile

You are a motivated student with a Master degree in Physics or related subjects. A good background in quantum optics, atomic physics, or precision laser spectroscopy will be helpful.

Your application

Your application should include:

1. A curriculum vitae
2. A short statement of your research interests
3. Transcript of records of your master and bachelor studies
4. Two reference letters should be directly sent to the following contacts

The electronical application should be sent to:
Prof. Dr. Kilian Singer: ks@uni-kassel.de
cc. Daqing Wang: daqing.wang@mpl.mpg.de