



2020 opening for PhD positions in Dipolar Quantum Gas Group (Innsbruck)

It is now an exciting time to work in the field of dipolar quantum gases, thrived by the recent discovery of novel phases of matter and unexpected quantum phenomena. Our Dipolar Quantum Group in Innsbruck is currently expanding, counting now three distinct experimental setups working with highly magnetic ultracold atoms. We are thus pleased to announce the **2020 opening for PhD positions in our group**. We are searching for talented young physicists to complete our team and to contribute on one of the following PhD research projects:

(A) Experimental project on “Unveiling the properties of the newly discovered dipolar supersolid phase with quantum gases of magnetic atoms”

(B) Experimental project on “New Frontiers of Rydberg Tweezers with multi-electron erbium atoms”

(C) Theoretical project in collaboration with M. Baranov on “Unveiling the properties of the newly discovered dipolar supersolid phase with quantum gases of magnetic atoms”

Working on this project will provide the opportunity to perform exciting experiments at the frontier of quantum physics, but also to collaborate with a large network of researchers worldwide, and to develop valuable high-tech skills in electronics, photonics, programming, and data analysis, among others.

OUR GROUP

The Dipolar Quantum Gas group is led by Francesca Ferlaino and co-led by Manfred Mark and Lauriane Chomaz. It is jointly located at the University of Innsbruck and at the Institute for Quantum Optics and Quantum Information (IQOQI) of the Austrian Academy of Science.

To learn more about our research and further openings visit www.erbium.at

HOW TO APPLY?

The PhD applications will be considered **upon reception and until filling of the available positions**. To apply, simply send an email to francesca-ferlaino-group@uibk.ac.at as soon as possible including your motivation as well as your CV, transcript of exams, and names of reference persons (minimum one). Women are particularly encouraged to apply.

WHAT ARE THE REQUIREMENTS?

Eligible candidates are physics students that have recently completed **a master degree in Physics**. The student should have knowledge on quantum physics and basic experimental physics. Background in experimental atomic, molecular and optical physics is not strictly required but certainly preferred. Most important qualities that we are searching for are motivation, curiosity, and passion for the physics and its techniques. We are flexible with the starting date but it should be before the end of 2020.