



Postdoctoral research opportunity in quantum gas theory

We have an open postdoctoral position within the Ultracold Quantum Matter Theory Group (<https://www.uibk.ac.at/exphys/ultracold-theory/>) at the University of Innsbruck. We are looking for a theorist with a strong computational background to work with Dr Russell Bisset, along with the potential for collaboration with Dr Francesca Ferlaino's Dipolar Quantum Gases Group.

Project description: By developing novel methods to simulate highly-magnetic dipolar Bose-Einstein condensates (BECs), we endeavor to lay the theoretical groundwork required to create the first-ever bulk supersolids, i.e., large self-organized droplet crystals that globally conduct superfluid currents. The project is based on combining two dipolar BECs, a situation that promises game-changing advantages. The Ferlaino Group — residing just down the corridor — is ideally positioned to make dipolar supersolid mixtures a reality, thanks to their cutting-edge expertise in creating dipolar supersolids with highly-magnetic rare-earth elements. The ideal candidate should have a PhD in physics, extensive experience with quantum gas research, be highly motivated and able to work both independently and within team settings.

Founded in 1669, the University of Innsbruck currently provides a world-class education to around 27,000 students. Innsbruck City is the capital of Tyrol, a modern city with traditional roots, nested in the heart of the Alps with stunning vistas and surrounded by fantastic opportunities for outdoor recreation such as skiing, hiking, climbing, paragliding and rafting. While the city itself offers an abundance of entertainment possibilities and cultural experiences, as well as numerous traditional and international restaurants and bars, the world-class public transport — by train, bus or plane — is ideal for taking advantage of the close proximity to iconic cultural centers such as Vienna, Munich, Venice and Zurich.

To apply, or for informal enquiries, please contact Russell Bisset (russell.bisset@uibk.ac.at). Interested applicants should submit a cover letter, CV, and the names and contact details of at least two referees.