

The Institute for Quantum Optics and Quantum Information – Vienna ([IQOQI-Vienna](#)) of the Austrian Academy of Sciences ([OeAW](#)), Austria's leading non-university research and science institution, are committed to advancing knowledge and enhancing human understanding of nature and its laws. We also actively pursue the vision of quantum information science and the wide range of new possibilities it would open up for humanity. To this end, we conduct theoretical and experimental research on the foundations of quantum physics and the physics of quantum information and develop new quantum technologies. The institute is offering a

POSTDOC POSITION (F/M/X)

(full-time, 40h per week)

in the Quantum Systems for Gravitational Entanglement research group led by Dr. Peter Asenbaum.

This new group is focused on experiments that study gravity in quantum systems. The goal is to learn whether gravity plays by the quantum rules. So far, the gravitational interaction between quantum states of single atoms and massive classical objects has been explored. To study the gravitational interaction between two objects in quantum states, one has to use two macroscopic particles. The experiments being set up explore novel techniques to prepare macroscopic particles in quantum states and study their gravitational interaction. For more information on the group's research activities, see [Asenbaum Group](#).

Your tasks:

- Participating in building and designing a new experimental setup
- Preparation and characterization of macroscopic particles
- Simulation of quantum state generation techniques
- Measurement and data analysis

Your profile:

- PhD in Physics
- Enthusiasm for working in a quantum optics lab
- Interest in precision measurement
- Lab experience

Interested candidates are invited to submit:

- Curriculum vitae
- A short research statement
- PhD thesis
- The electronic (email) contact details of at least two potential referees.

to applications-iqoqi@oeaw.ac.at and in cc to peter.asenbaum@oeaw.ac.at (mentioning Job ID: IQOQIVIE085PD224). The earliest starting date is October 01st 2024.

We offer an annual gross salary of € 66.501,40 according to the collective agreement of Austrian Academy of Sciences.

The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. Individuals from underrepresented groups are particularly encouraged to apply.