

Job ID: IQOQIVIE074DOC226

The Institute for Quantum Optics and Quantum Information Vienna ([IQOQI Vienna](#)) of the Austrian Academy of Sciences ([ÖAW](#)), Austria's leading non-university research and science institution, is offering a position as

**PRAEDOC (DISS) (F/M/X)**  
(part-time, 30h per week)

in the Quantum Information and Foundations of Physics research group led by Dr. Markus Müller. "Praedoc" is the official job title of a **PhD position**, supervised at IQOQI Vienna and awarded by the University of Vienna.

The Müller group's research focuses on foundational problems in theoretical physics from an information-theoretic perspective, with quantum information theory as its main tool. The group addresses a variety of questions with the rigorous methods of mathematical physics.

For more information on the research activities of the group, see [Müller Group](#).

We are offering a 2-year (extendible) Praedoc position to a highly motivated and well-qualified researcher to start on or after November 1, 2026. This theoretical research will be conducted in the context of an FWF Principal Investigator Project "[Relational and operational quantum physics in spacetime](#)", which involves research at the intersection of quantum information theory, quantum foundations, and high-energy physics.

**Your profile:**

- Master's degree in physics or mathematics suitable for the PhD program of the University of Vienna.
- Strong background in quantum information theory and mathematical methods. In particular, the ability to work independently, and familiarity with formulating and proving mathematical theorems are essential.
- Enthusiasm for the foundations of quantum physics. In particular, interest in (some of) the following:
  - Quantum Reference Frames
  - Quantum Field Theory
  - Quantum Measurement Theory
  - Operator Algebras
  - Gauge Theory
- Ability to work well in a team.
- Excellent English language and communication skills.

**Interested candidates are invited to apply as follows:**

The candidate will be selected via the VCQ PhD program. Please [apply for this program](#) online until July 31, 2026; the VCQ application form will be the unique source of information that we review in our assessment of your application. **Additionally**, please also apply at this link: <https://oeawnr.onlyfy.jobs/de/job/i2yh1o0t> and put copies of your VCQ application documents there. (No need to write an additional motivation letter and CV document for this; just upload minimal documents that contain copies of what you wrote in the VCQ application).

The minimum annual gross salary for this position is EUR 53.140,92 (full-time based), in accordance with the collective agreement of the Austrian Academy of Sciences (ÖAW). For part-time employment, the salary will be adjusted on a pro rata basis in line with the agreed working hours.

*The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. The OeAW lays special emphasis on increasing the number of women in senior and in academic positions. Given equal qualifications, preference will be given to female applicants.*