

# Assistant Professorship in Experimental Condensed Matter Physics (W1) with tenure track (W2) (f/m/d)

The University of Cologne is one of the oldest and largest universities in Germany. With its six Faculties covering a broad spectrum of disciplines and its internationally outstanding research profile areas, it enjoys an excellent reputation for its academic achievements and high standards of undergraduate and graduate education. The Faculty of Mathematics and Natural Sciences comprises six departments with about 180 professors and 9,000 students and is one of the largest faculties in the country. "Matter and Light for Quantum Computing" (ML4Q) is a cooperation by the universities of Cologne, Aachen, Bonn and the Research Center Jülich. The research cluster is funded within the German Excellence Strategy.

## YOUR TASKS

The candidate is expected to contribute actively to the main research lines of ML4Q in the field of device physics and to extend strategically the research spectrum of experimental condensed matter physics at the Institute of Physics II at the University of Cologne. The candidate will actively participate in the teaching of experimental condensed matter physics and quantum technologies.

## YOUR PROFILE

Research experience in mesoscopic quantum devices is required. Possible future directions include new technologies to improve solid-state qubits, implementation of error corrections or mitigations, realization of Majorana qubits, and developments of new device concepts for quantum technologies. Qualification requirements include an excellent track record in research. First teaching experience is an advantage.

## OUR OFFER

The University of Cologne provides a stimulating academic environment with a wide range of career development opportunities as well as support services for dual career couples and family-friendly working conditions.

The position (of a *Juniorprofessorin / Juniorprofessor*) is available at the earliest possible date. Formal requirements are detailed in Section 36 of the Higher Education Act of North Rhine-Westphalia (Hochschulgesetz – HG NRW).

In the third year after taking office, an interim evaluation takes place. This serves as the basis for deciding whether to grant the candidate an extension for another three years. A final evaluation takes place no later than in the sixth year after taking office.

On this basis, a decision is made as to whether the candidate will receive a permanent position at W2 level. Both evaluations are conducted in accordance with the Regulations for Quality Assurance in Tenure Track Procedures of the University of Cologne. During the current funding period of ML4Q the teaching load can be reduced. For further information on the tenure-track procedure, please visit: [https://am.uni-koeln.de/e34120/am\\_mitteilungen/@88/AM\\_2021-89\\_Neufassung\\_TT-Oplus\\_ger.pdf](https://am.uni-koeln.de/e34120/am_mitteilungen/@88/AM_2021-89_Neufassung_TT-Oplus_ger.pdf). W1 professorships comprise a teaching load of four hours per week (i.e., two hours per week is one 90-minute course per semester) in the first qualification phase and five hours per week in the second qualification phase. As a rule, W2 professorships comprise a teaching load of nine semester hours per week.

The University of Cologne is committed to equal opportunities and diversity. Women are especially encouraged to apply and will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from people with disabilities / special needs or of equal status.

Please submit your application via the University of Cologne's Academic Job Portal (<https://professorships.uni-koeln.de>) by June 30, 2022. Your application (in English) should be addressed to the Dean of the Faculty of Mathematics and Natural Sciences. Applicants should send a full CV (including lists of publications, third-party funding and teaching experience), proofs of qualification, a summary of past achievements with a commented list of up to five publications, a research plan, and teaching concept.