

The key profile area „Quantum Matter and Materials“ at the University of Cologne - supported by the **university's master plan and the federally funded excellence initiative** - is seeking applications for the following positions:

Full Professorship (W3/tenured) for Theoretical Physics

condensed matter theory
(Institute for Theoretical Physics)

Full Professorship (W3/tenured) for Theoretical Physics

statistical physics of complex systems
(Institute for Theoretical Physics)

Assistant Professorship (W1/tenure track) for Experimental Physics

solid state physics (II. Physics Institute)

Assistant Professorship (W1/tenure track) for Physical Chemistry

(Chemistry department)

All positions shall be filled as soon as possible. The successful candidates will have an outstanding research record in the field of theoretical condensed matter physics, statistical physics, experimental solid state physics or physical chemistry, respectively, that reasonably complements and expands the ongoing research activities at the University of Cologne.

Possible research areas of the full professorship (W3/tenured) in theoretical physics (condensed matter theory) include quantum many-body systems, topological matter or their mathematical description. The successful candidate is expected to actively participate in teaching the full theoretical physics curriculum.

Possible research areas of the full professorship (W3/tenured) in theoretical physics (statistical physics of complex systems) include statistical physics of non-equilibrium processes or complex networks. Research foci may include fundamental principles as well as interdisciplinary applications. The successful candidate is expected to actively participate in teaching the full theoretical physics curriculum.

The successful candidate for the assistant professorship (W1/tenure track) in experimental physics is expected to be an outstanding expert in solid state physics. Possible research areas include strongly correlated electron systems, topological matter or non-equilibrium dynamics. Teaching responsibilities include active participation in the experimental physics curriculum.

Possible research areas of the assistant professorship (W1/tenure track) in physical chemistry should include a modern approach to light-matter interactions, such as nano-optics, plasmonics, non-linear optics of soft matter, sensor technology or related fields. The successful candidate is expected to actively participate in teaching the physical chemistry curriculum.

During the funding period of the excellence initiative the teaching load is reduced.

The University of Cologne is an equal opportunity employer and encourages applications from women and people with disabilities.

Applicants should send a CV, proof of qualification, lists of publications and teaching experience, a concise statement of research interests and reprints of five selected publications to the **Dean of the Mathematical-Natural Science Faculty of the University of Cologne, Albertus-Magnus-Platz, 50923 Cologne, Germany, E-Mail: mnf-berufungen@uni-koeln.de**.

Closing date for applications is 26/10/2012.

