

PhD Position

Theoretical Quantum Physics

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We are looking for motivated and talented PhD candidates for the new *Quantum Technology* research group of Martin Kliesch at the Heinrich Heine University **Düsseldorf** (HHU). The group aims to fill up two positions until **summer 2018**.

Research area and topics: The successful candidates will work on interdisciplinary projects within the fields of *quantum many-body physics*, *condensed matter physics*, and *quantum information theory*. The PhD candidates will start with one specific research project that will be chosen together with the candidates according to their interests and abilities. During the PhD the candidates will become involved in more research projects. We are a broadly interested research group, working on topics including:

- Quantum simulation
- Applied mathematics
- Certification
- Aspects of computational complexity
- Quantum tomography
- Compressed sensing
- Tensor networks
- Deep learning for quantum systems

While our group is part of the **physics** institute, we also welcome applications from students with a background in **mathematics** or **computer science**. We value **creativity**, openness to interdisciplinary **collaborations**, and **mathematical rigor**.

We provide a salary based on the German TV-L E13 pay scale. Appointments of doctoral candidates will be for three years at 50% E13. Being a young and still small research group, its students are offered optimal supervision with **much discussion time**. Moreover, we provide the **latest hardware** allowing for a modern work style (X1 Yoga ThinkPad + docking station with 4k monitor).

How to apply: Candidates should send a **CV** (including grades) and a **short statement of research** interests to quantum@mkliesch.eu. Please include electronic contact details of **two potential referees**. The application **deadline is May 6, 2018**. Later applications will be considered in case not all positions will have been filled.

Equal rights and opportunities: The HHU places particular value on equal rights and opportunities. Applications of women are thus especially encouraged; applications of students with disabilities will be given preferential treatment to those of the other candidates with equal qualifications.