



Technische
Universität
Braunschweig



The solid-state theory division AG-FKT at the Institute for Theoretical Physics of the Technical University of Braunschweig invites applications for a

Postdoctoral Position in Condensed Matter Theory

Starting spring 2015, Salary: 100% TV-L E13

Duration: initially for 2 years, extendable up to 5 years

The scientific focus will be on exotic states, novel excitations, and non-equilibrium properties of quantum magnets in low dimensions, with potentially competing interactions, frustration, and complex lattice topologies. This research will be part of the AG FKT's continuing activity to develop and apply new analytical and large scale computational methods of theoretical condensed matter physics and will be integrated into the stimulating environment of the Physics Department of the Technical University of Braunschweig and the AG-FKT's involvement in research networks on spin dynamics, thermal transport, and magnetic nano systems.

Candidates should hold a doctorate, PhD, or equivalent degree in physics, and should have a proven track record within one or several of these research areas:

- **correlated many-body systems out of equilibrium**
- **frustrated and/or low-dimensional spin systems**
- **transport properties and thermalization of quantum matter**

The postdoctoral scholar is expected to initiate own research within these fields, as well as to participate in the AG-FKT's related scientific activities. Candidates with a working experience in one or several of modern **computational quantum many-body techniques**, such as exact diagonalization, time-dependent density-matrix renormalization group, or quantum Monte-Carlo are particularly encouraged to apply.

This position can be filled in any time starting January 2015. Reviewing of applications will begin immediately and will continue until an appropriate candidate has been selected. The appointment's initial duration is for two years, but may continue up to five years. The salary will be according to 100% TV-L E13. While not mandatory, candidates will be strongly supported in any pursuit of a Habilitation degree. Part of the scholar's responsibilities will be to organize tutorships and engage in teaching assistance.

The Technical University of Braunschweig aims at increasing the number of women in science. Qualified female candidates are encouraged to apply. In case of comparable qualifications, women and candidates with disabilities will take precedence. Applications containing a CV, list of publications, research statement, and two letters of recommendation should be sent, preferably by email, to Prof. Dr. Wolfram Brenig w.brenig@tu-bs.de, or to

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