With more than 6,300 employees in research, teaching and administration and its unique profile, TU Dortmund University shapes prospects for the future. The cooperation between engineering and natural sciences as well as social and cultural studies promotes both technological innovations and progress in knowledge and methodology. And it is not only the more than 34,300 students who benefit from that.

**Postdoc Position in Experimental Condensed Matter Physics (m/w/d) (Ref.-Nr. w03-21)**

The Faculty of Physics at TU Dortmund University invites applications for a full-time position of postdoctoral research scientist in experimental condensed matter physics with a focus on terahertz quantum spin dynamics. The initial employment for two years can start at the earliest possible date with the possibility of prolongation. According to the public tariff regulations, the salary is based on tariff group E13 TV-L with 100 % of the regular work time.

**Profile:**
The successful candidate will work on the EU Horizon 2020 Project Nonequilibrium Terahertz Dynamics of Interacting Quantum Spins: from Novel Driven States towards Coherent Controls, which is funded by the European Research Council via the ERC Starting Grant. The main goal of the project is to investigate and understand the non-equilibrium quantum spin dynamics driven by strong-field terahertz pulses, in a tunable external condition such as low temperatures and high magnetic fields. The project will be realized by setting up a time-resolved terahertz spectroscopy combining with an optical cryo-magnet. The experiments will be carried out mainly in house and also complementarily at the large scale user facilities.

**Requirements:**
The ideal candidate fulfils the following requirements:
- an excellent PhD degree of physics with a solid background in one or more of these research fields: condensed matter physics, magnetism, optics, and laser physics;
- practical scientific experience in time-resolved ultrafast spectroscopic techniques, laser setups, and/or low-temperature apparatus;
- good team player and communicative skills;
- an excellent track record.

**Responsibilities:**
The successful candidate will set up the time-resolved terahertz spectroscopy and the low-temperature apparatus, carry out the studies of quantum spin dynamics, and disseminate the research findings (e.g. by conference presentations and peer-reviewed journal publications). The candidate will also involve in guiding bachelor, master and PhD students in their study and research activities and in conduction of physics-related courses (4 hours/week).

We explicitly note that applications of all sexes are welcome. Applications from women are favored complying with legal regulation.

We also underline that applications of severely disabled persons are welcome.
Applications enclosing curriculum vitae, a list of publication, a motivation letter, and contact details of at least two references should be sent until **25.03.2021** under reference number w03-21 to:

**Prof. Dr. Zhe Wang**  
Technische Universität Dortmund  
Fakultät Physik  
44227 Dortmund  
zhe4.wang@tu-dortmund.de

For further information, please do not hesitate to contact:  
Prof. Dr. Zhe Wang  
Tel. 0231/755 – 3518; E-Mail: zhe4.wang@tu-dortmund.de

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