



The Faculty of Physics, School of Science at the University of Excellence TU Dresden is offering a research position to be filled at the Institute of Applied Physics (IAP) in the Chair of Experimental Physics / Photophysics (Prof. Dr. habil. Lukas M. Eng) by a

## PhD-Student

in the area of **"Magnetic-Force Microscopy of non-collinear magnetic phases"** (subject to personal qualification employees are remunerated according to salary group E13 TV-L).

Starting by the next possible date (preferably by **January 2018**), the position entails 75% of the fulltime weekly hours, and can be filled for a duration of up to 36 months. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz WissZeitVG). The position allows the candidate to achieve his/her next academic qualification (PhD), and to become scientifically competitive on an international level through peer-reviewed publications and conference contributions.

**Tasks:** The candidate will be responsible for the microscopic investigation of **skyrmions** and other **non-collinear spin textures** by applying our dedicated and unique scanning probe methods (SPM) [i.e. magnetic force microscopy (MFM), Kelvin-probe force microscopy (KPFM), piezo-response force microscopy (PFM), and near-field scattering optical microscopy (SNOM)] at variable temperatures. The candidate will be part of the world-leading team known for its outstanding local-scale skyrmion research by means of SPM methods, and also work in tight collaboration with the cooperative research center SFB 1143 *"From Frustration to Topology"* at TU Dresden. Beyond his/her own qualification, the position also includes supervision and guidance of Master and Bachelor students.

**Requirements:** Excellent university degree (Master, Diploma or equivalent) in physics; experience and profound understanding in the fields of magnetism or low-temperature scanning force microscopy; very good interpersonal and communication skills; an independent, target- and solution-driven work attitude; fluent English, both oral and written. Applications by women and people with special needs are particularly welcome.

**Submission:** Please submit your complete application (including cover letter, CV, list of publications, scientific achievements, summary of the master thesis, certificates, names of two referees, etc.) preferably by e-mail as a **single** PDF-document to <u>lukas.eng@tu-dresden.de</u> (note that TU Dresden is currently unable to receive electronically signed and encrypted files), or alternately by surface mail to: **Prof. Dr. L.M. Eng, TU Dresden, Fakultät Physik, Institut für Angewandte Physik, Nöthnitzer Str. 61, 01187 Dresden, Germany.** Please submit copies only, as your application cannot be returned to you.

Submission is possible *asap*, and your application will be evaluated immediately. Please feel free to contact Prof. L.M. Eng by phone (+49-351-463-33427) or e-mail (<u>lukas.eng@tu-dresden.de</u>) for any further information.