We are a young, innovative university in the middle of the Ruhr Metropolis. Excellent in research and teaching, we think in terms of possibilities instead of limits and develop ideas with a future. We live diversity, promote potential and are committed to educational equality that deserves this name.

The **University of Duisburg-Essen** is searching for a position in the **Faculty of Physics**, Department of Experimental Physics, at the **Campus Duisburg** to conduct frontier reseach in the fields of magnetism, spintronics, topological matter and/or unconventional computing as a

Scientific Researcher (f/m/d)
(Entgeltgruppe 13 TV-L)

Main research topics and duties:

In our research team TWIST we investigate the complex fundamental physics of topologically protected magnetic structures - skyrmions. In particular, we study the interplay between skyrmions, different magnetic structures, and spin and charge currents. This interplay is governed by microscopic mechanisms within complex materials that must also be understood and engineered. Gaining a deeper understanding of these mechanisms to optimally utilize the properties of skyrmions towards potential spintronics applications is a key focus of our work.

We are pleased to announce the opening of a PhD position in our TWIST-team at the University of Duisburg-Essen. The selected applicant will conduct frontier research in the fields of magnetism, spintronics, topological matter and / or unconventional computing and artificial intelligence in particular regarding the creation and dynamics of topological magnetic structures in ferro- and antiferromagnets.

The community of researchers studying magnetic phenomena in the Ruhr region belongs to the best in Germany and it is expected that the position holder will benefit from numerous possibilities for collaboration for example through the DFG funded Collaborative Research Centers CRC 1242 and TRR 270.

As part of this graduate position, the successful applicant is offered ample opportunity for further scientific training (culminating in a PhD).

Your profile:
- A Master in Physics or a related field
- A background in theoretical techniques in condensed matter physics
- Experience in spintronics, magnetization dynamics, antiferromagnets, physics of skyrmions and micromagnetic modelling as well as unconventional computing schemes are highly suited for this opportunity
- Programming experience is desired
- Fluent in oral and written English.
- A high degree of independence, meanwhile also stimulate interaction with colleagues

We offer:
- a varied, diverse range of tasks
- training and further education offers
- discounted company ticket
- sports and health offers (university sports)

Start of position: next possible date

Contract period: 3 years

Working time: 75 %

Application deadline: 31.07.2022

The University of Duisburg-Essen aims to promote the diversity of its members (see http://www.uni-due.de/diversity).

It is seeking to increase the number of women on its scientific staff and therefore strongly encourages suitably qualified women to apply. In case of equal qualification, women will be given preference in accordance with state equal opportunity legislation. Applications from suitable handicapped persons and equivalent applicants according to Article 2, Paragraph 3 of the social code (SGB IX) are also welcome.

Your application should contain:
- A Cover letter describing your motivation for pursuing this work and how you expect the work to fit into your long-term goals.
- A CV including the list of publications.
- At least two letters of reference by people familiar with your work to be sent directly to Prof. Everschor-Sitte.

Please email you application to twist-administration@uni-due.de using the subject line "TWIST PhD application at UDE" and quoting the reference number **257/22.**

Information on the Faculty and the advertised vacancy is available at:
https://www.uni-due.de/physik/

www.uni-due.de

audit
familiengerechte
hochschule
Zertifikat seit 2010