The Faculty of physics offers a part-time research position starting October 1st, 2020 (E13 TV-L, non permanent position)

Your Tasks
In the spinGMI project, highly sensitive magnetic field sensors based on the giant magneto-impedance effect (GMI) are integrated with a novel nanoscale spin-electronic excitation and readout method. The project takes place as a cooperation between the Saarland University, Halle University and Bielefeld University as well as industrial partners. The research tasks are structured as follows:

- development of a thin film system that allows the production of spin torque oscillators with a high output power
- communication and collaboration with the industrial partners and scaling of thin film manufacturing on a wafer scale for industry-related processes and high reproducibility of the layer parameters during the development process
- patent exploitation, in particular of spintronic components and the associated technological developments and possible applications
- elaboration, documentation and presentation of the results achieved, preparation of publications

The opportunity for further academic qualification and doctorate is given.

Your Profile
We expect

- completed Master degree (e.g. university or university of applied sciences) in the field of solid state physics or related subject areas with a very good degree (e.g. Master of Science)
- extensive knowledge of solid state physics, magnetism and thin film technology
- high ability to work in a team and talent for organization, especially ability to cooperate with project partners
- independent, responsible and committed work
- very good knowledge of the spoken and written English language

Preferable qualifications

- experience in thin film production using sputter deposition and in microstructural characterization (especially X-ray diffraction, X-ray fluorescence, diffusion analysis, magnetometry) and lithography
- experience in the planning, implementation and evaluation of transport measurements on microstructured samples
- experience in creating scientific texts and presenting scientific work results

Remuneration
Salary will be paid according to Remuneration level 13 of the Wage Agreement for Public Service in the Federal States (TV-L). As stipulated in § 2 (1) sentence 1 of the WissZeitVG (fixed-term employment), the contract will end after three years. In accordance with the provisions of the WissZeitVG and the Agreement on Satisfactory Conditions of Employment, the length of contract may differ in individual cases. The employment is designed to encourage further academic qualification. The position is advertised as 65 % part-time job. In individual cases, this percentage may be reduced on request, as long as this does not conflict with official needs.

Bielefeld University is particularly committed to equal opportunities and the career development of its employees. It offers attractive internal and external training and further training programmes. Employees have the opportunity to use a variety of health, counselling, and prevention programmes. Bielefeld University places great importance on a work-family balance for all its employees.

Application Procedure
For full consideration, your application should be received via either post (see postal address below) or email (a single PDF document sent to reiss@physik.uni-bielefeld.de by June 8th, 2020). Please mark your application with the identification code: wiss20142. Please do not use application portfolios and send only photocopies of original documents because all application materials will be destroyed at the end of the selection procedure. Further information on Bielefeld University can be found on our homepage at www.uni-bielefeld.de. Please note that the possibility of privacy breaches and unauthorized access by third parties cannot be excluded when communicating via unencrypted e-mail. Information on the processing of personal data is available https://www.uni-bielefeld.de/Universitaet/Aktuelles/Stellenausschreibungen/2019_DS-Hinweise_englisch.pdf.

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