Karlsruhe Institute of Technology (KIT) – The Research University in the Helmholtz Association creates and imparts knowledge for the society and the environment. It is our goal to make significant contributions to mastering the global challenges of humankind in the fields of energy, mobility, and information. For this, about 9,300 employees of KIT cooperate in a broad range of disciplines in research, academic education, and innovation.

In Division V – Physics and Mathematics, the KIT Department of Physics, invites applications for a

**Tenure-Track-Professorship on**

**Quantum Control of Spins on Surfaces (W1) at the Physikalisches Institut.**

The research focus of this professorship includes the study of nanoscale magnetic quantum systems on surfaces (e.g. single atom spins, nuclear spins, spin centers in molecules), which will be controlled by scanning probe microscopy. It is intended to further strengthen KIT's excellence in the fields of quantum information processing and quantum sensing. The successful candidate should have excellent skills in experimental solid-state physics with a focus on scanning probe microscopy, strong expertise in ultra-high vacuum and low temperatures measurement techniques, as well as experience in coherent control of quantum systems. An integration into existing and/or future research networks (e.g. SFBs, Quantum Network of the Baden-Württemberg Foundation) is desired. After positive evaluation, the research activities in the W3 phase are expected to contribute to the Helmholtz program *Natural, Artificial and Cognitive Information Processing* (NAGIP), at the interface between the topics Quantum Materials and Quantum Computing.

The tenure-track professorship will be integrated into the KIT Faculty of Physics. According to § 2 para. 1 no. 4 LVVO BW, the teaching load of the tenure-track professorship amounts to 4 hours per week (6 after midterm evaluation) during the semester. The tenure-track professor will also contribute to administrative duties. Non-German-speaking applicants should be prepared to learn the language and teach in German after a reasonable time.

According to § 51 of the Universities Act (Landeshochschulgesetz) of the state of Baden-Württemberg the recruitment requirements include a university degree, pedagogical aptitude and a special aptitude for scientific work, which is usually demonstrated by a doctorate of outstanding quality. Further requirements for employment are found in the "Qualitätssicherungskonzept für Juniorprofessuren und Tenure-Track-Professuren am Karlsruher Institut für Technologie (KIT)". Additionally we expect that the applicant has already obtained funding for a junior research group the duration of which has expired by less than one half at the time of publication of this advertisement.

Employment will initially be for a period of six years as a temporary civil servant or as an employee (according to "Beurlaubungsmodell" § 15 Abs. 2 KIT-Gesetz); in the fourth year a midterm evaluation will be carried out. In case of a positive final evaluation, a call to a permanent professorship (W3) with the predominant performance of major research tasks according to the KIT Act as amended from time to time will be made.*

The evaluation procedure and general criteria are defined in the above mentioned "Qualitätssicherungskonzept". Of particular importance are own visible contributions to the field of research, internal and external interdisciplinary cooperations, third-party funding, successful teaching, supervision of young scientists, and openness to contribute to the topic of technological innovation.

KIT is an equal opportunity employer. Female scientists are especially encouraged to apply. Applicants with disabilities will be preferentially considered if equally qualified. KIT is a certified family-friendly university and offers part-time employment, leave of absence due to family reasons, dual-career service and coaching to support balance between family and career. For the career development, KIT offers an accompanying procedure and mentoring.

Your personal data will be processed by Karlsruhe Institute of Technology (KIT) in accordance with this **Privacy Policy**.

Qualified candidates should submit before 11.07.2021 a curriculum vitae, a detailed list of previous employment times, a list of the five most important publications, as well as research and teaching statements to: Dekanat der KIT-Fakultät für Physik, Karlsruher Institut für Technologie (KIT), 76128 Karlsruhe, Germany, preferably by email with a single pdf-file attached to dekanat@physik.kit.edu. For further information about this position please contact Prof. Dr. M. Le...
Tacon (IQMT), e-mail: matthieu.letacon@kit.edu.

*According to the current legal situation, leave of absence for the performance of major research tasks according to § 15 para. 2 KITG prior to the entry into force of the 2nd KIT-Weiterentwicklungsgesetzes.

KIT – Die Forschungsuniversität in der Helmholtz-Gemeinschaft.