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, and to excel in fundamental and applied research. 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 - at the KIT Department of Physics, a

W3 Professorship for Data Processing and Electronics

is to be filled at the earliest possible date. The position includes the directorship of the KIT Institute of Data Processing and Electronics (IPE).

We are looking for an internationally recognized personality who represents and further develops the fields of detector instrumentation, electronics, and data acquisition / processing for application in basic physical research at the forefront of research and teaching. The IPE plays a leading role in the development of readout and control systems for superconducting quantum sensors and qubits and focuses on research and development in high-performance instrumentation in particle and astroparticle physics, such as at CMS, PANDA, KATRIN, IceCube or DARWIN, in ultra-fast beam diagnostics, and of synchrotron radiation experiments. Further activities include the development of power electronics and battery systems for stationary and mobile applications as well as a variety of technology transfer projects.

The IPE covers a broad range of skills in detector development, assembly and connection technologies, in analog and high-frequency electronics, massively parallel digital electronics and their efficient programming, as well as in the development of complex algorithms for image reconstruction and data analysis. The institute has unique infrastructures and laboratories and is in charge of setting up the KIT laboratory for superconducting sensors. With its competences, the IPE conducts research in the Helmholtz Research Field Matter and plays a key role in shaping one of its programs.

At KIT the successful candidate will be met by an excellent interdisciplinary environment at the interface between engineering and natural sciences. The holder of the position cooperates closely with his / her colleagues at KIT and especially in the KCETA Center of Excellence and the KSETA Graduate School.

The recruitment takes place in accordance with Section 15 (2) of the KIT Act. In teaching, committed participation in existing and new courses in German and English in physics, electrical engineering and information technology as well as in related courses of other KIT faculties is expected. Habilitation or equivalent work experience that includes didactic skills is required. Teaching experience is desired. The employment requirements of Section 47 of the State University Act in connection with Section 20 of the KIT Act apply.

KIT aims to increase the proportion of female professors and therefore welcomes applications from qualified women. Applicants with disabilities will be given preference if they are suitable for the position. The processing of your personal data by the Karlsruhe Institute of Technology (KIT) takes place in accordance with this data protection declaration.

Applications with the usual documents (including curriculum vitae, research plan, description of previous and planned teaching activities and a list of publications) are to be sent to the Dean's Office of the KIT Department of Physics, Division V, Karlsruhe Institute of Technology (KIT), 76128

Karlsruhe, e-mail: <u>dekanat@physik.kit.edu</u> by February 26, 2021 (preferably in electronic form concatenated into one pdf document). For information regarding this position, please contact Prof. Dr. Thomas Müller, e-mail: <u>thomas.mueller@kit.edu</u>