

# KSETA Doctoral Fellow

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The „**Karlsruhe School of Elementary Particle and Astroparticle Physics: Science and Technology (KSETA)**“ is the Graduate School of the *KIT Center Elementary Particle and Astroparticle Physics (KCETA)*; it is funded by the DFG within the Excellence Initiative since November 2012. KSETA is now accepting applications for several PhD positions starting in **July 2020** or later. Our PhD program leads to a doctoral degree in physics, informatics or electrical engineering.

With more than 300 scientists, KCETA bundles the research activities of the Karlsruhe Institute of Technology (KIT) in theoretical and experimental elementary particle and astroparticle physics and is one of Europe's leading institutions in these fields. The graduate school KSETA offers an inspiring interdisciplinary research environment composed of the fields of cosmic radiation, dark matter, quantum field theory, experimental and theoretical collider physics, experimental and theoretical flavour physics, neutrino physics and computational physics as well as the development of modern technologies necessary for these fields such as superconducting terahertz detectors, analogue and digital electronics, optical transmission technology and parallel signal processing on GPUs. We contribute key components to large-scale research projects such as AMS, Pierre Auger Observatory, Belle, CMS, EDELWEISS, IceCube-Gen2 and KATRIN, as well as the German Tier-1 center GridKa.

The graduate school provides an attractive research environment, with subjects for doctoral dissertations at the intersections of experimental and theoretical particle and astroparticle physics as well as engineering, in particular in the areas electronics, detector instrumentation, sensory, computer science, data management and data analysis. The school augments this with an individually tailored course program for both physicists and engineers.

A Masters or Diploma degree in physics, electronic engineering, computer science or other related discipline qualifying for research at KSETA is required for application. Please register prior to application at <http://www.kseta.kit.edu/application.php>.

Further information about the application procedure, available research topics, subjects for doctoral dissertations and the KSETA principal investigators can be found at <http://www.kseta.kit.edu>.

The PhD positions at KSETA are awarded once per year. The next closing date for applications is **March 20, 2020**. Documents received after the deadline will only be considered in the following application period.

Funding will be provided through employment contracts. Two stipends funded by DAAD (German Academic Exchange Service) are reserved for foreign applicants.

KIT – The research university in the Helmholtz Association.

Karlsruhe Institute of Technology (KIT) is a public corporation pursuing the tasks of a State University of Baden-Wuerttemberg and of a national research center of the Helmholtz Association. The KIT mission combines the three strategic lines of activity of research, higher education, and innovation. With about 9,400 employees and 24,500 students, KIT is one of the big institutions of research and higher education in natural sciences and engineering in Europe.