



The Cluster of Excellence “Precision Physics, Fundamental Interactions and Structure of Matter (PRISMA+)” addresses the basic questions about the nature of the fundamental building blocks of matter and their importance for the physics of the universe. It consists of renowned research groups that work primarily in the areas of astroparticle, high energy and hadron physics, nuclear chemistry as well as precision physics with ultra-cold neutrons and ion traps.

One of the key initiatives of the Cluster is the construction of a new accelerator called MESA (Mainz Energy-recovering Superconducting Accelerator). The P2 experiment at MESA aims to measure the weak mixing angle $\sin^2\theta_W$ at low momentum transfer Q^2 with unprecedented precision. This requires a detector capable of measuring asymmetries on the sub-ppb level in several hundred billion scattered electrons per second.

In the Institute of Nuclear Physics our group is building the P2 tracking detector in high-voltage monolithic active silicon pixel technology in close collaboration with the PRISMA detector laboratory, a joint initiative bundling expertise and resources for detector development. We are looking for a

Ph.D. Student

to join the P2 tracker group. The successful candidate will be involved in the design and construction of the pixel tracker and the associated readout electronics. We require a master degree in experimental physics and interest in silicon detectors, detector mechanics and cooling and FPGA-based detector readout systems. We offer work in a small international collaboration at the cutting edge of detector technology. The position is limited to the duration of the Ph.D. project, typically three years. Salary and benefits are in accordance with German standards (50% TV-L E13).

Please direct any questions and your application (cover letter, CV, list of two references in a single pdf file) to Prof. Dr. Niklaus Berger (niberger@uni-mainz.de) until September 30th, 2019.

The Johannes Gutenberg University Mainz aims at increasing the percentage of women in academic positions and strongly encourages women scientists to apply. The university is an equal opportunity employer and particularly welcomes applications from persons with disabilities.