

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 $\sin^2 \vartheta_W$ at low momentum transfer Q² with unprecedented precision. This requires a detector capable of measuring asymmetries on the ppb level in several hundred billion scattered electrons per second, complemented with a high resolution, high-speed tracking detector to determine Q² and excellent polarimetry.

The Institute of Nuclear Physics is involved in all parts of the P2 detector construction, in collaboration with the PRISMA detector laboratory, a joint initiative bundling expertise and resources for detector development. We are looking for a

Postdoc

to join the P2 group, initially to work on the detection system for the innovative Hydro-Møller polarimeter. We require a Ph.D. in particle/nuclear physics or related areas and experience with detector simulation, design and tests. We offer work in a small international collaboration at the cutting edge of detector technology. The position will initially be limited to 2 years starting in 2020 with the possibility of an extension. Salary and benefits are in accordance with German standards (TV-L E13, approx.. 46,000 – 65,000 EUR p.a.).

Please direct any questions and your application (cover letter, CV, list of three references in a single pdf file) to Prof. Dr. Niklaus Berger (niberger@uni-mainz.de) until January 15th, 2020.

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.

JOHANNES GUTENBERG UNIVERSITÄT MAINZ

