



Open PhD positions

Johannes Gutenberg-Universität Mainz
Germany
Institute of Nuclear Physics



JOHANNES GUTENBERG
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The P2 experiment: Precise Determination of the Weak Mixing Angle

The P2 experiment at the new MESA-accelerator of the Institute for nuclear physics at Mainz University in Germany aims at a precision measurement of the weak mixing angle in order to search for new physics beyond the Standard Model at a mass scale up to 50 TeV.

The experiment employs elastic scattering of polarised electrons off unpolarised protons at a beam energy of 155 MeV. A spectrometer system based on a superconducting solenoid and modern particle detectors has been designed and will be constructed over the coming years and used in the measurement.

Description of PhD positions

The experiment is in its design phase and will start to install its components in the following years. Research activities comprise

- Building detectors for particle physics
- Data acquisition electronics
- Simulation works

Possible candidates should have

- Excellent grades in the master certificate
- Interest in experimental physics
- Motivation to work in an international team at an electron accelerator facility
- Excellent English skills

Interested?

You can find more about the P2 experiment at: <http://www.blogs.uni-mainz.de/fb08p2/>

Please submit an application per e-mail including a CV, a motivation letter and two letters of reference to:

Dr. Sebastian Baunack, Email: baunack@kph.uni-mainz.de