

Status Update of NoMoS

Tuesday, 12 September 2017 18:00 (1 hour)

We present a new method of spectroscopy, utilizing a drift effect to disperse charged particles in a uniformly curved magnetic field. The curved field results in a drift of the charged particles perpendicular to the radius of the curvature and to the magnetic field, which is proportional to the particle's momentum. A spatial-resolving detector will determine the momentum spectra.

The first realization, called NoMoS (Neutron decay prOducts MOmentum Spectrometer), will measure correlation coefficients in free neutron beta decay to test the Standard Model of particle physics and to search for physics beyond. Currently, the focus is on the design and the construction of the magnet system.

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