Beam based alignment tests at the Cooler Syncrotron (COSY) — Tim Wagner for the JEDI-Collaboration — Institut für Kernphysik, Forschungszentrum Jülich — III. Physikalisches Institut B, RWTH Aachen University

The Jülich Electric Dipole moment Investigation (JEDI) Collaboration works on a measurement of the electric dipole moment (EDM) of charged hadrons using a storage ring. Such a dipole moment would violate CP symmetry, providing a test for physics beyond the Standard Model. The JEDI experiment requires a small beam orbit RMS in order to measure the EDM.

Therefore an ongoing upgrade of the Cooler Syncrotron (COSY) is done in order to improve the precision of the beam position. In this talk the first results of the beam based alignment method that was tested with one quadrupole will be presented. The measurements were done during a beam time in November 2017.

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