

Channeling 2018



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Electromagnetic Dipole Moments of Charged Baryons with Bent Crystals at the LHC

Monday, 24 September 2018 11:20 (30 minutes)

We propose a unique program of measurements of electric and magnetic dipole moments of charm, beauty and strange charged baryons at the LHC, based on the phenomenon of spin precession of channeled particles in bent crystals. Studies of crystal channeling and spin precession of positively- and negatively-charged particles based also on GEANT4 simulations are presented, along with feasibility studies and expected sensitivities for the proposed experiment using a layout based on the LHCb detector.

Summary

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