

# Proof-of-principle test for a charm baryon dipole moment experiment at the LHC

*Tuesday, 6 June 2023 17:20 (20 minutes)*

Magnetic and electric dipole moments of fundamental particles provide powerful probes for physics within and beyond the Standard Model. For the case of charm baryons these have not been experimentally accessible to date due to the difficulties imposed by their short lifetimes. An experimental test at the insertion region 3 of LHC is foreseen during Run3 to demonstrate the feasibility of a fixed-target experiment with bent crystals. The goal of the proof-of-principle test and the perspective for a future experiment will be presented along with projected sensitivities for different luminosity scenarios.

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**Session Classification:** New facilities

**Track Classification:** New facilities