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## Direct measurement of charm baryon dipole moments at LHC

*Thursday, 11 July 2024 14:40 (20 minutes)*

A fixed-target experiment at LHC to measure directly the dipole moments of charm baryons is presented. The experimental approach is based on the phenomenon of spin precession for channeled particles in bent crystals and on the precise measurement of the charm baryon polarisation. The measurement of the magnetic moment of charm baryons would allow to determine the charm quark magnetic moment. A proof-of-principle test at LHC is foreseen during LHC Run3 to prove the feasibility of the experiment. The latest progress, the advancements and the perspective for the future experiment will be discussed.

### **session**

A. Facilities and Detectors

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**Session Classification:** A. Facilities and Detectors