

Proposed measurements of electromagnetic dipole moments of strange and charm baryons at LHC

Wednesday, 19 October 2022 15:20 (20 minutes)

Electromagnetic dipole moments of fundamental particles provide powerful probes for physics within and beyond the Standard Model. For the case of short-lived particles these have not been experimentally accessible to date due to the difficulties imposed by their short lifetimes. Novel experimental techniques have been developed to allow a unique program of direct measurements of electric and magnetic dipole moments of strange and charm baryons at the LHC. In recent years significant R&D and feasibility studies have been carried on with encouraging results. The physics program and the projected sensitivities for different luminosity scenarios are discussed.

Primary author: Prof. NERI, Nicola (University and INFN Milano)

Presenter: Prof. NERI, Nicola (University and INFN Milano)

Session Classification: Parallel 2

Track Classification: Quark-Diquark Models and/or Exotics