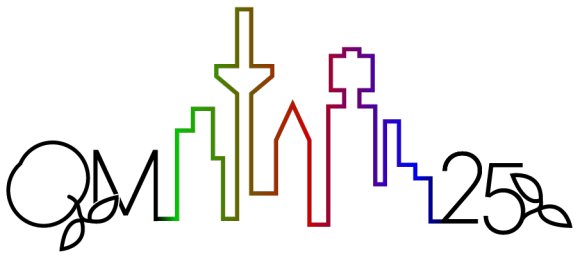

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Strangeness production and polarization in fixed-target and proton-lead collisions at LHCb

Wednesday 9 April 2025 08:40 (20 minutes)

With its precise vertex reconstruction and particle identification capabilities, the LHCb detector is ideally suited to study the production and polarization of strange particles. In addition, being the origin of hyperon polarization from unpolarized proton-proton and proton-nucleus collisions not yet fully understood, measurements in different collision systems and kinematic ranges must be provided. In this contribution, recent LHCb measurements of strange hyperon production and polarization in proton-lead collisions are discussed, including their implications for hadronization modification in small collision systems and for transverse-momentum-dependent parton distributions and fragmentation functions.

Category

Experiment

Collaboration (if applicable)

LHCb

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