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Multi-strange baryon production in Pb-Pb and pp collisions at √sNN = 2.76 TeV with the ALICE experiment at the LHC

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Measurement of the production of strange and multi-strange particles is a fundamental tool in the investigation of the hot and dense QCD matter created in ultra-relativistic nucleus-nucleus collisions, as there is no net strangeness content in the initial colliding system.

Multi-strange baryons are measured in the ALICE apparatus through the reconstruction of the cascade topology of their weak decays into charged hadrons, exploiting the tracking and particle identification capabilities of the central barrel detectors.

The increased production of (multi-)strange (anti-)baryons in A-A collisions with respect to normal hadronic interactions (known as strangeness enhancement) and their nuclear modification factor RAA as a function of the transverse momentum and collision centrality are the main subjects of this contribution. Results in Pb-Pb collisions at $\sqrt{\text{sNN}} = 2.76$ TeV for five centrality intervals and in pp collisions at the same centre-of-mass energy will be

presented and compared with the corresponding lower energy nucleus-nucleus measurements.

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