Hot Quarks 2014



Contribution ID: 36 Type: Experimental

Multi-strange baryon production in pp, p-Pb and Pb-Pb collisions measured with ALICE

Saturday 27 September 2014 10:30 (20 minutes)

Transverse momentum spectra and yields of charged Ξ and Ω at mid-rapidity in proton-proton (pp), proton-lead (p-Pb) and lead-lead (Pb-Pb) collisions measured in the ALICE experiment at LHC will be presented. These particles are reconstructed via their cascade weak decay topology into charged particles only, using the excellent tracking and particle identification capabilities of the detector. For p-Pb and Pb-Pb, the Ξ and Ω spectra were also studied as a function of collision centrality. The results will be compared with model predictions. The multi-strange baryon production relative to non-strange particles has been studied for different centralities. The new measurement in p-Pb collisions will act as interface to understand the change in relative strangeness production from pp collisions to Pb-Pb collisions. Furthermore, the nuclear modification factors for the charged Ξ and Ω particles, compared with those for other light particles, will be shown and discussed.

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