

Strange Hadrons Spectra and Directed Flow in STAR Fixed target Experiment

Some QGP signatures, such as number-of-constituent-quark scaling of v_2 , can be seen to persist down to $\sqrt{s_{NN}} = 7.7$ GeV, while others, such as suppression R_{CP} , show a turn-off behavior at low beam energies. Fixed target collisions in STAR allow the center-of-mass energy to go as low as 4.5 GeV. This would provide an opportunity to measure such signatures down to an energy range that can serve as a clean “control” energy in which only a pure hadron gas is expected. In this poster we will present directed flow of strange hadrons K_S^0 and Λ and their comparison with model calculations (RQMD, UrQMD, AMPT, QGSM with parton recombination, and a hydrodynamics model with a tilted source). Furthermore, we will present spectra of strange hadrons K_S^0 , Λ , and Ξ .

Preferred Track

Baryon-Rich QCD Matter and Astrophysics

Collaboration

STAR

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