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# Thermalization in 3.0 GeV fixed target collisions from the RHIC Beam Energy Scan

*Monday 12 December 2022 14:00 (1 hour)*

We report modifications to the traditional Blast wave fit to momentum spectra of particles at mid rapidity emitted from central Au+Au collisions at √sN N = 3.0 GeV in STAR, and compare to HADES Collaboration results at √sN N = 2.4 GeV. We explore a scenario of a
Gaussian shape of emission source in rapidity, which modifies the boost invariance assumption of the traditional Blast wave model. Such a modification is to be expected when the produced fireball is fully hadronic and the ideal hydrodynamics breaks down. The modified Blast wave model seems to be able to unify the π/K/p spectra to common temperature and transverse flow velocity, indicating that the thermal equilibrium is achieved in the hadronic system produced in 3.0 GeV Au+Au collisions.

## Session

Heavy Ions and QCD

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