Quark Matter 2018



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Type: Parallel Talk

PHENIX Measurements of $dN_{ch}/d\eta$ in small systems (p+A, d+Au, and ³He+Au)

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The PHENIX experiment has an excellent data set for small systems including p+Au, d+Au, 3He+Au at 200 GeV as well as the d+Au beam energy scan down to 19.6 GeV. We present new measurements of $dN_{ch}/d\eta$ for all of these systems over a broad range in pseudorapidity $-3 < \eta < +3$ and event multiplicity. These measurements provide key constraints of baryon stopping models and are compared with various theoretical calculations. The measurements are also compared with flow observables as a function of pseudorapidity to explore scaling relations. In particular measurements as a function of collision energy provide key inputs for calculations for the upcoming A+A beam energy scan at RHIC in terms of particle production and baryon rapidity shifts.

Content type

Experiment

Collaboration

PHENIX

Centralised submission by Collaboration

Presenter name already specified

Author: DAVID, Gabor (Brookhaven National Laboratory)
Presenter: MCGLINCHEY, Darren (Los Alamos National Laboratory)
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