

Rapidity dependence of charged particle production in
 $p + p$ collisions at $\sqrt{s} = 200$ GeV
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Ultrarelativistic $p + p$ collisions represent an important baseline system for understanding the physics of heavy ion collisions. They can also provide direct insights into topics such as baryon number transport and particle production mechanisms. For a full understanding of these phenomena, detailed measurements over a wide range of rapidities and transverse momenta are needed.

The BRAHMS experiment at RHIC has measured π^\pm , K^\pm , p and \bar{p} production from $p + p$ collisions at $\sqrt{s} = 200$ GeV, covering a rapidity interval of $0 < y \lesssim 3$. Adding this dataset to our existing results from Au+Au and d +Au events gives us a unique window on the systematics of particle production in nuclear collisions.

In this presentation we will show transverse momentum spectra of identified particles from $p + p$ collisions, and discuss the y dependence of absolute yields, inverse slopes and particle ratios. Comparisons will be made with results from other collisions systems and energies, and with various model predictions.