

Abstract Submitted
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Produced Hadron Spectra in $p + p$ Collisions at $\sqrt{s}=200$ GeV

K. HAGEL, Cyclotron Institute, Texas A&M University, BRAHMS COLLABORATION — The rapidity dependence of particle production in high energy $p + p$ collisions can provide important information of parton distribution functions and the transport of baryon number. In addition, $p + p$ collisions provide an elementary reference for heavy ion collisions. Identified charged hadron spectra resulting from $p + p$ collisions at RHIC have been measured over a wide range of rapidity with BRAHMS for $\sqrt{s}=200$ GeV. We will present the spectra of positive and negative π and p . The spectra are analyzed to extract rapidity densities over the rapidity range from 0 to near 4 which we compare to rapidity distributions of the same species of produced hadrons in Au + Au collisions at the same energy. The proton rapidity densities are used to determine nuclear stopping while the pion yields constrain the total entropy production.

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