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Antiparticle to particle ratios and identified hadron spectra for p+p collisions in $\sqrt{s}=62.4$ GeV at STAR

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Information about the evolution of the system formed during the high energy p + p collisions can be obtained by investigating the charged particle ratios. The particle ratios serve as an important indicator of the collision dynamics [1]. These can be used to probe the process of hadronization in high energy collisions. In this poster, we will present measurements of mid-rapidity antiparticle to particle ratios in p + p collisions at $\sqrt{s}=62.4$ GeV from the STAR experiment. The charged pion and kaon particle ratios as well as the antiproton to proton ratios will be measured as a function of transverse momentum using the TPC detector. Charged hadrons will be identified by using specific ionization energy loss at the low momentum region (0.15 to 0.75 GeV) [2-3]. We will compare our results with the previous measurements made with same collision system at ISR energies [4]. Antiproton to proton ratio will be obtained after applying background corrections to the proton yields.

References

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