Charged Kaon Production Versus Centrality in 18 GeV/c p-Au Collisions

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Abstract

E910 at the Brookhaven AGS is a fixed target proton-nucleus experiment that uses a large acceptance TPC with downstream tracking and particle ID detectors. Charged Kaon yields can be determined cleanly for rapidity and transverse mass values within the TPC acceptance by kinematically reconstructing charged Kaon decays occurring in the TPC. This talk will describe the correlation between charged Kaon yields in 18 GeV/c p-Au collisions and the number of collisions experienced by the projectile in the target nucleus. In addition to the total charged Kaon yields, the dn/dy and Mt distributions of the charged kaons will be presented as a function of the number of projectile collisions. Implications of the E910 results for charged Kaon production in A-A collisions will be discussed.

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