

Study of K_S^0 , Λ and $\bar{\Lambda}$ production at the Main Injector Particle Production Experiment at Fermilab

The Main Injector Particle Production (MIPP) experiment at Fermilab is a full acceptance spectrometer to measure hadronic particle production using beams of π^\pm , K^\pm , p and \bar{p} ranging in momentum from 5 to 120 GeV/c on several targets, for example liquid Hydrogen, Beryllium, Carbon, Bismuth, Uranium and NuMI. The experiment has excellent charged particle identification for particles of momentum from 0.1 to 120 GeV/c using Time Projection Chamber (TPC), Time of Flight (ToF), multicell Cherenkov, RICH detector and Calorimeters. A technique to reconstruct K_S^0 , Λ and $\bar{\Lambda}$ has been developed and is being studied. This poster describes the method for V-finder, fitter and presents the preliminary results from the interaction of 58 GeV/c π^\pm , K^\pm , p and \bar{p} on liquid Hydrogen target and 120 GeV/c protons on Carbon target.

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