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Measurement of Hadron Production for the FNAL Neutrino Program JONATHAN PALEY, Indiana University, MIPP TEAM — Measurements of neutrino cross-section and oscillations depend heavily on neutrino flux predictions. Such predictions rely on hadron-nucleus interaction cross-section data, and yet the data are scarce. The E907 Main Injector Particle Production (MIPP) experiment at Fermilab is a full acceptance spectrometer with excellent particle identification capabilities. MIPP has collected $\sim 15 \times 10^6$ events of p's, π 's and K's at various momenta (from 5 to 120 GeV) on several targets spanning the periodic table, from hydrogen to uranium including beryllium and carbon. In particular, MIPP has collected hadron production data on a spare NuMI target using 120 GeV/ c protons from the Main Injector. We review the experiment, performance of the spectrometer and show preliminary results of particle production ratios of π^-/π^+ , K^+/π^+ , K^-/π^- , and K^-/K^+ in bins of longitudinal and transverse momentum for thin and thick carbon targets.

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