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MIPP Experiment at Fermilab and Particle Fragmentation Scaling Law HOLGER MEYER, Fermi National Accelerator Laboratory, MIPP COL-LABORATION — The Main Injector Particle Production experiment (MIPP-FNAL E-907) at Fermilab uses a large acceptance spectrometer to measure particle production on hydrogen and nuclei using tagged secondary p, K, and  $\pi$  beams of both charges and momenta from 5 to 80 GeV/c and a primary proton beam of 120 GeV/c. MIPP's physics run has just started and will last till the summer of 2005. The experiment has charged particle identification for the whole of final state phase space using a combination of dE/dx, ToF, Cherenkov and RICH technologies. We explore the dynamics of minimum bias interactions and test a scaling law of fragmentation with unprecedented precision and statistics. Other physics of the MIPP experiment (meson spectroscopy, Nuclear Physics, service measurements for neutrino experiments) will be described briefly. Possibilities to upgrade MIPP by speeding up its electronics will be mentioned.

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