

Some Pentaquark Updates

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Check of GEANT treatment of low energy protons

Takashi was directed to an old paper showing low energy proton behavior in scintillator (Johnston et al., IEEE Trans. Nucl. Sci. NS-5 (1958) 95).

They measured the PH deposited by protons of 68 MeV kinetic energy (364 MeV/c) and below in scintillator.

As a test of GEANT/GCALOR treatment of low energy protons, Joe Comfort ran protons into scintillator at 364 MeV/c

Data had 6.4% of protons losing significant energy, GEANT has 7.0%.

Comparison of spectra from 364MeV/c protons

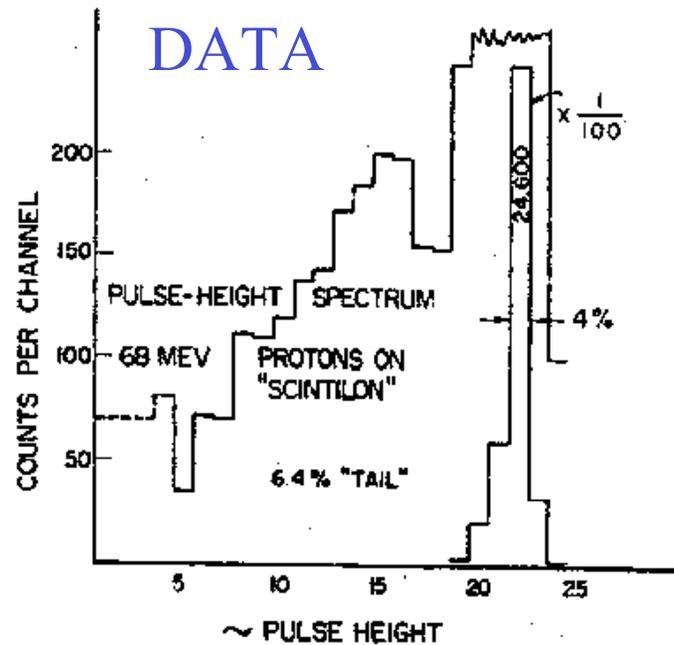
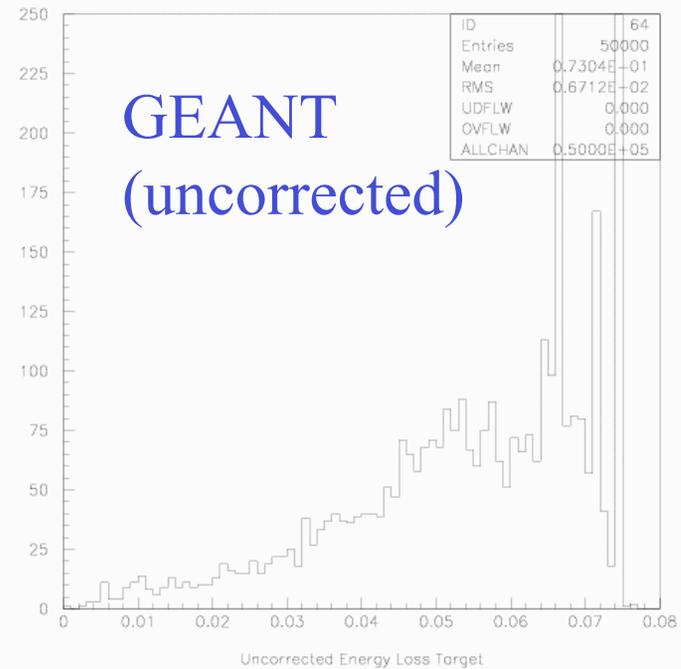
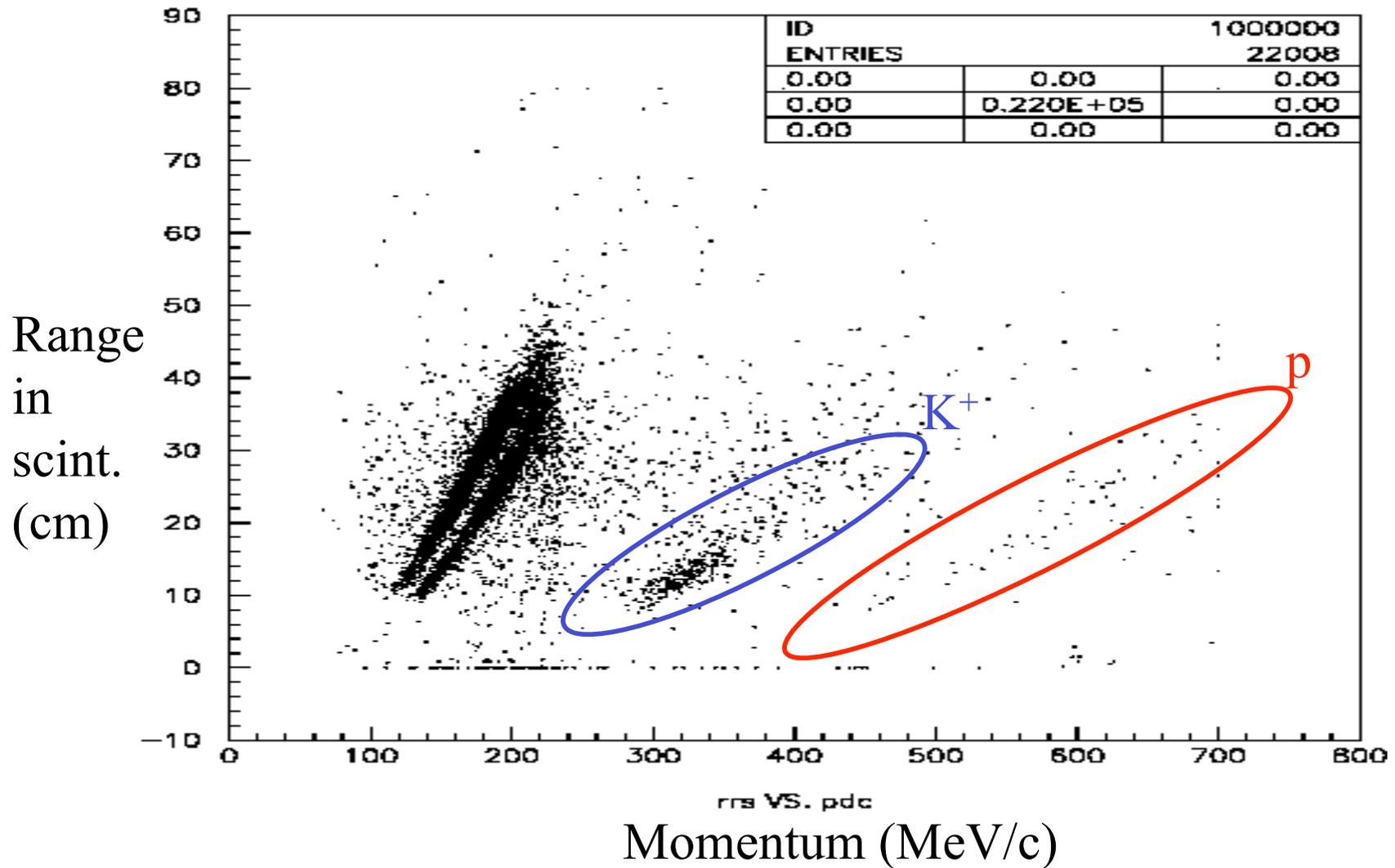


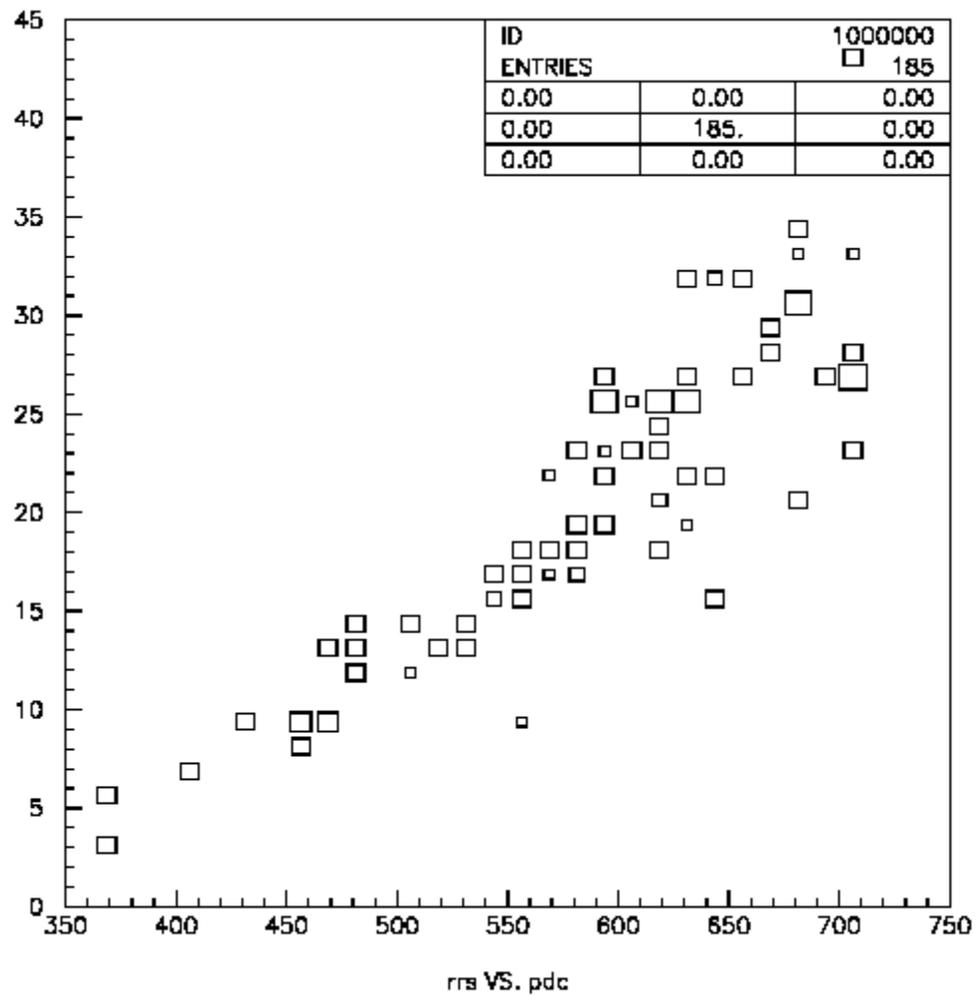
Fig. 7—Pulse height distribution on a ten-channel analyzer for 68 mev protons on "Scintilon."



Using E949 Data to study protons in scintillator



Closeup



First look at E vs P for protons

