

New Additions to Reconstruction

- PID:

CDC for PiPlus and Protons with $\theta > 12^\circ$

- * Protons: $dE/dx > e^{(-4.0*|p| + 2.25)} + 1.0$

- * PiPlus: $dE/dx < e^{(-7.0*|p| + 3.0)} + 6.2$

where $|p|$ is the magnitude of the momentum.

Timing:

- * (BCAL - RF) Δt (ns) ± 1 ns Proton&PiPlu

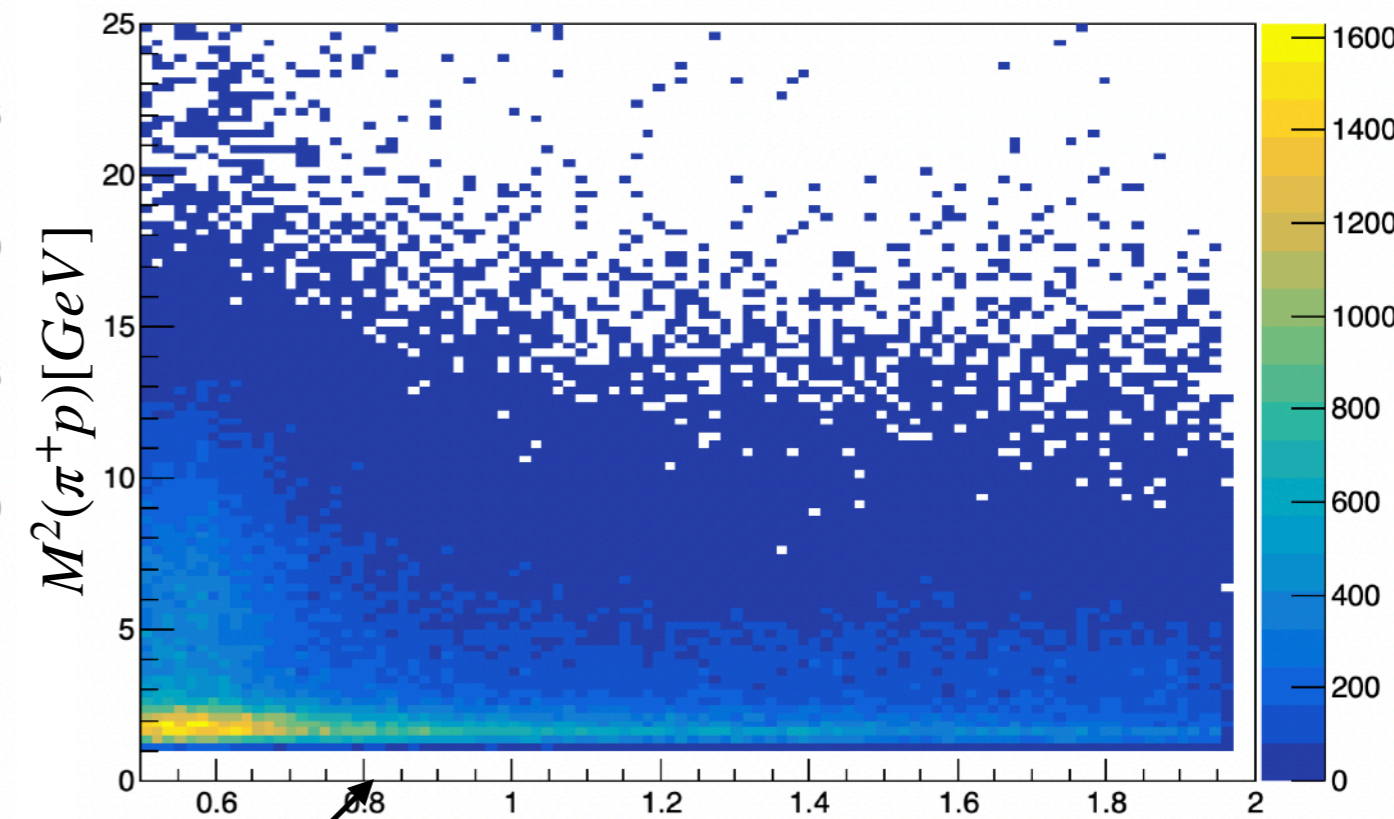
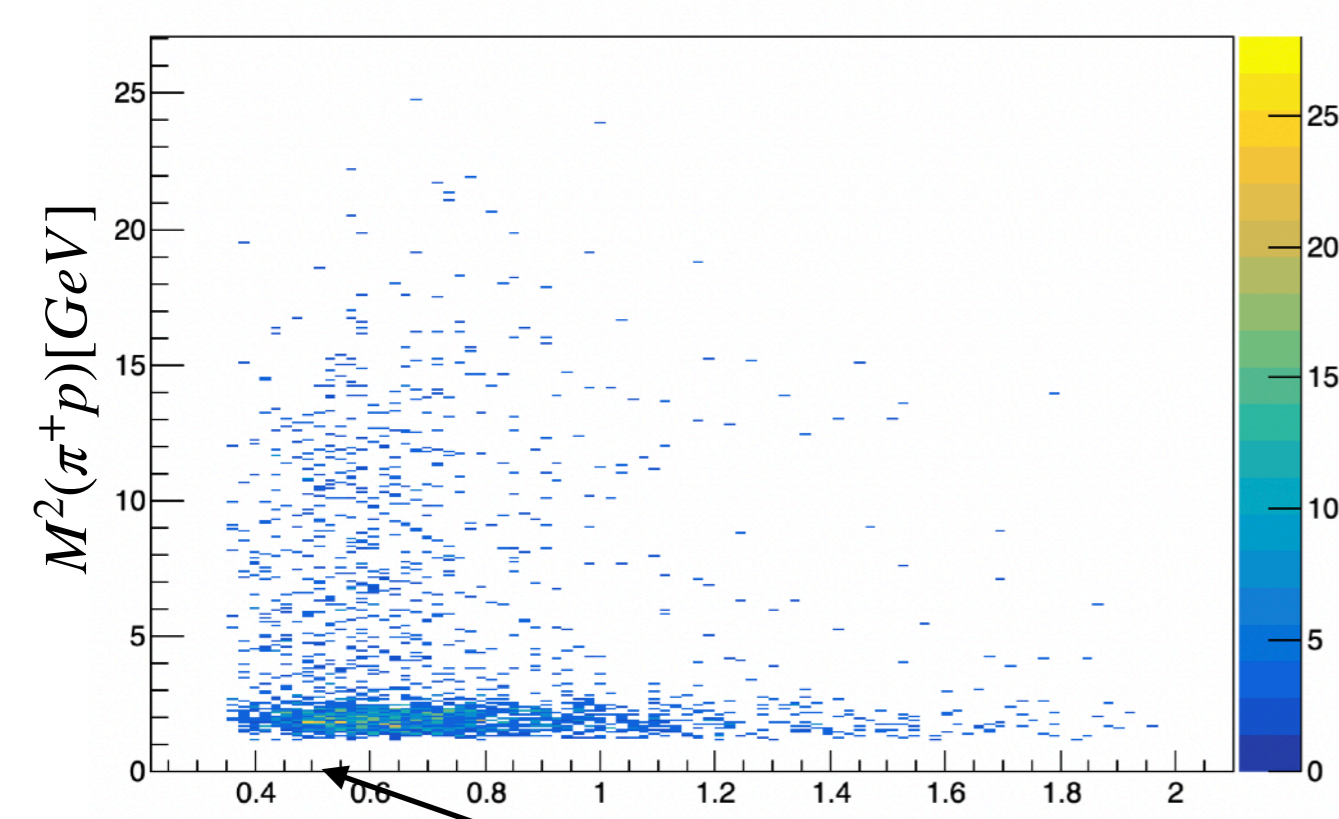
- * (TOF - RF) Δt (ns) ± 0.6 ns Proton & 0.5 ns Pion

Taken from: https://halldweb.jlab.org/wiki/index.php/Spring_2017_Analysis_Launch_Cuts

- $170 \text{ deg} \leq |\Delta\phi_p - \Delta\phi_{\pi^+}| \leq 190 \text{ deg}$

Simulation

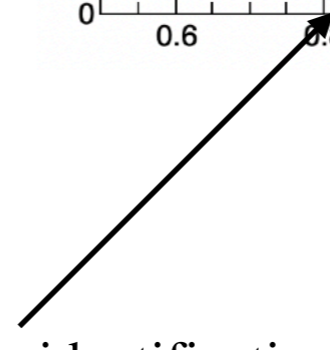
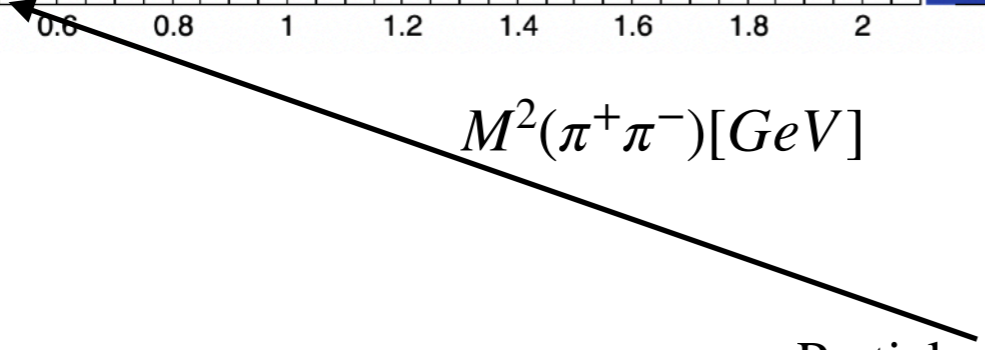
4He Data

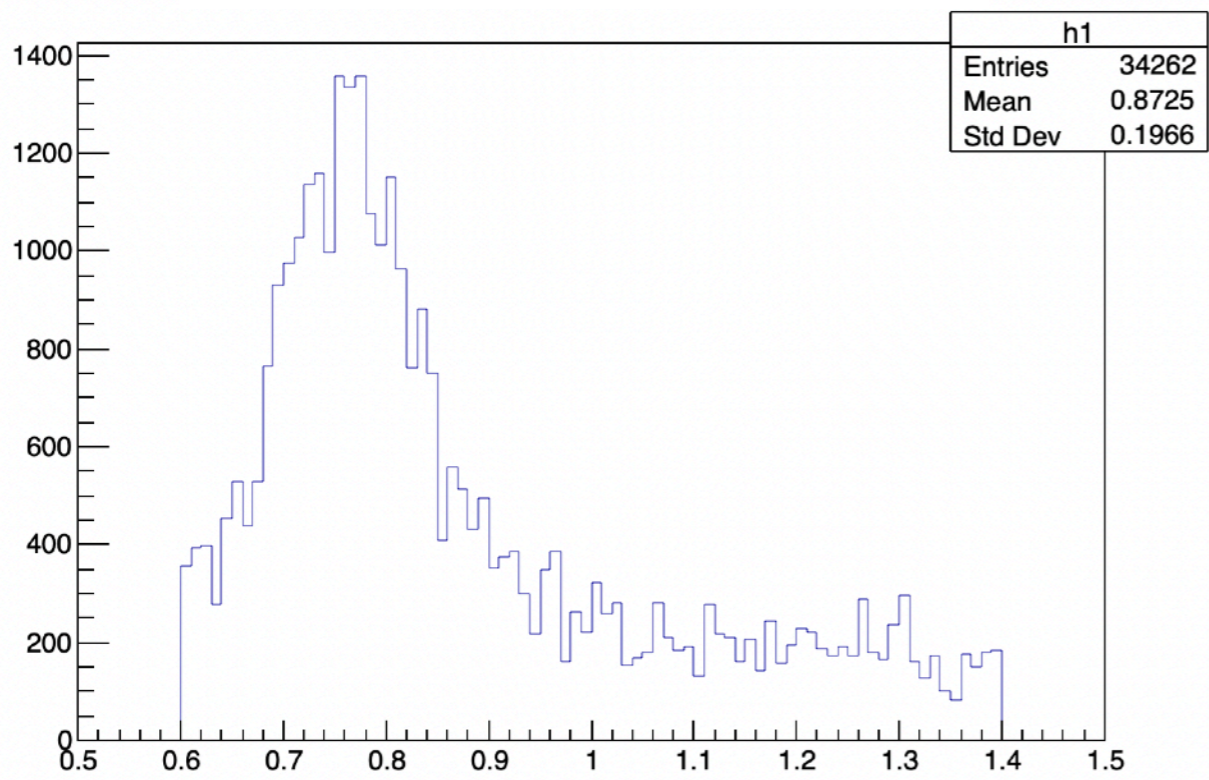


$M^2(\pi^+ \pi^-)$ [GeV]

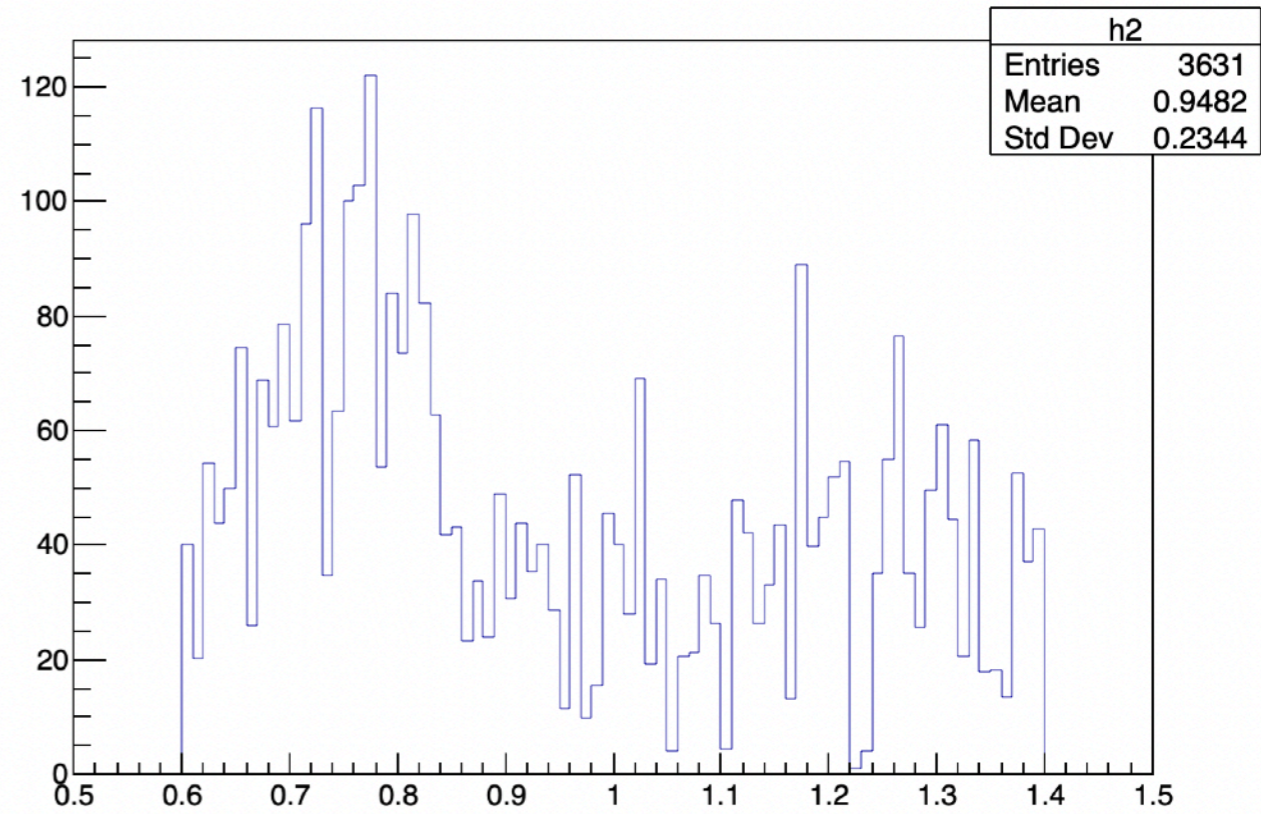
$M^2(\pi^+ \pi^-)$ [GeV]

Particle miss-identification





$M(\pi^+\pi^-)[GeV]$



$M(\pi^+\pi^-)[GeV]$

