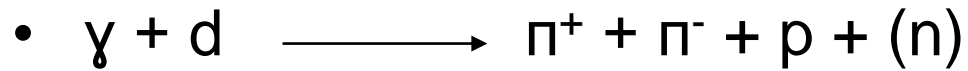


Prelim Analysis for Rho0 Candidate in Deuterium.

- ReactionFilter plugin is used to find the events for Rho0 channels to make an Analysis Trees.



A) Reaction 1_45__8_9_14_m13 Flag: F4B4 (P4 and Vertex Constraint) with 4 Beam Bunches

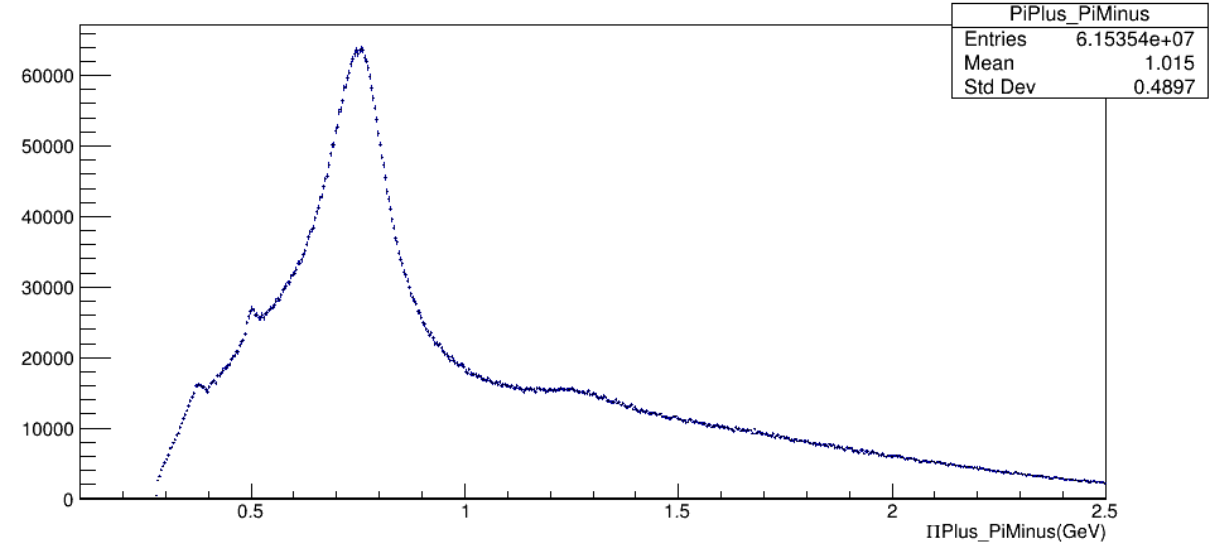
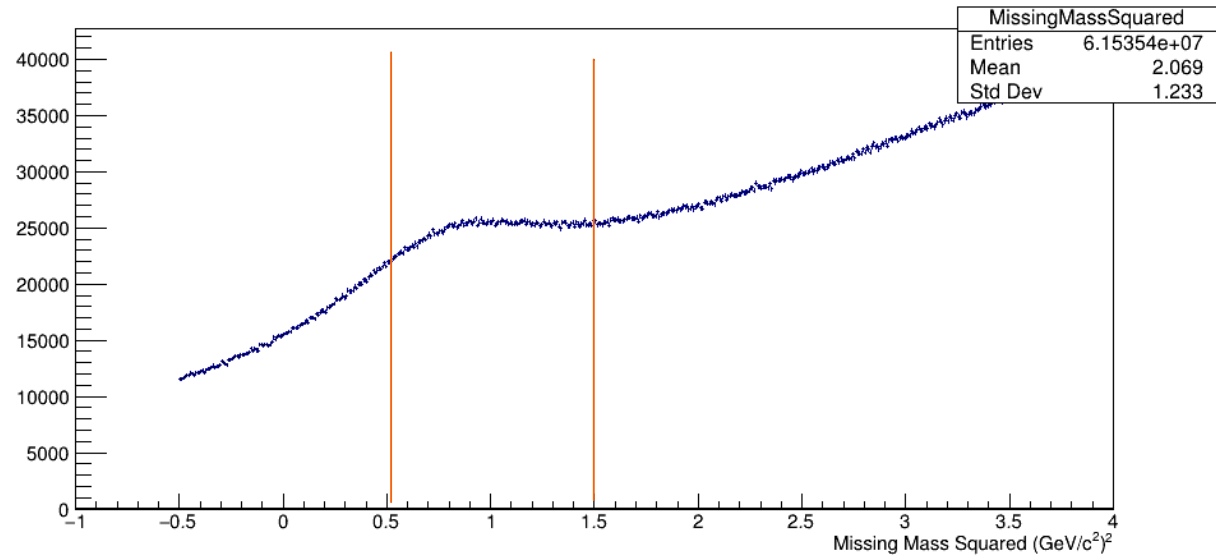
B) Reaction 1_14__8_9_14 Flag: F4B4

Applied Cuts

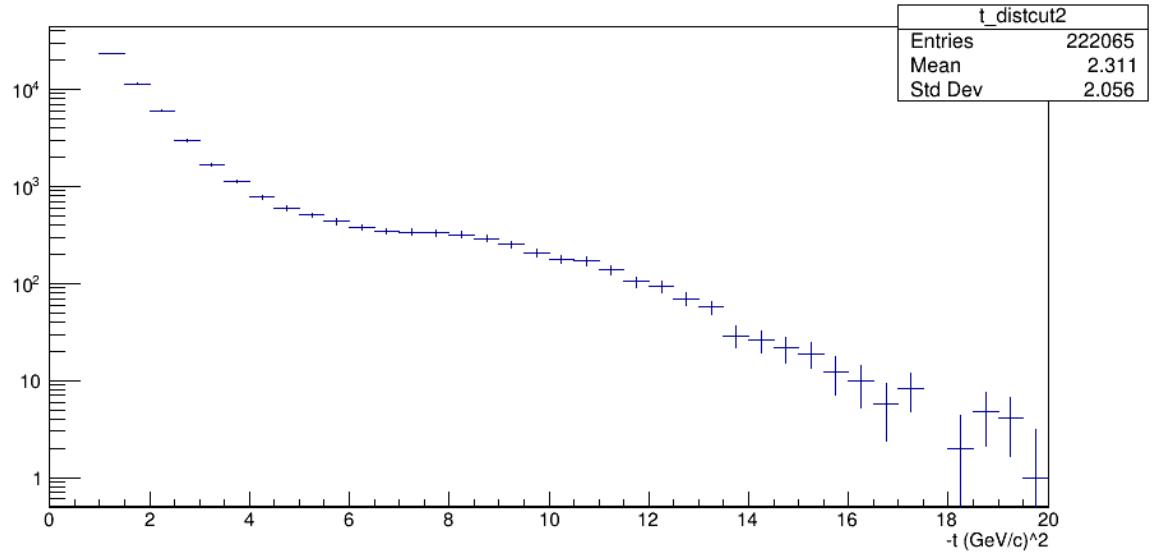
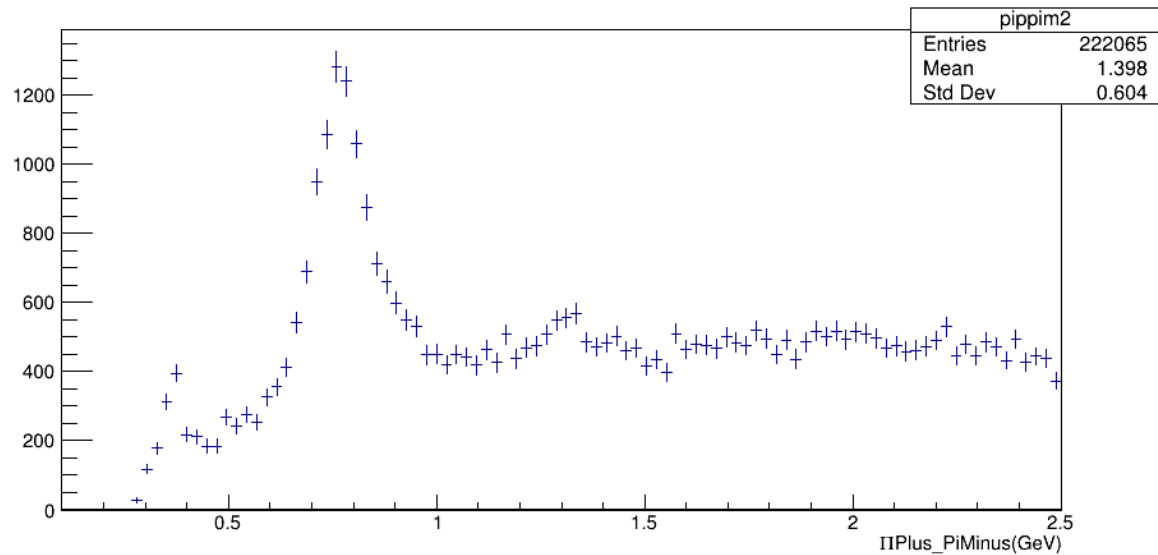
- $E_\gamma > 7.5 \text{ GeV}$
- $52 \text{ c.m} < Z_{\text{vertex}} < 78 \text{ c.m}$
- $CL > 0.001$ (Confidence level cut)
- $0.5 < MM2 < 1.5$ (Missing Mass Squared)
- $|t| > 1$ and $|u| > 1$
- (π^+p) Invariant Mass > 1.4 && (π^-p) Invariant Mass > 2
- Coplanarity between Rho and proton: $160 < \Delta(\rho-p) < 200$ degree.

Reaction 1_45__8_9_14_m13

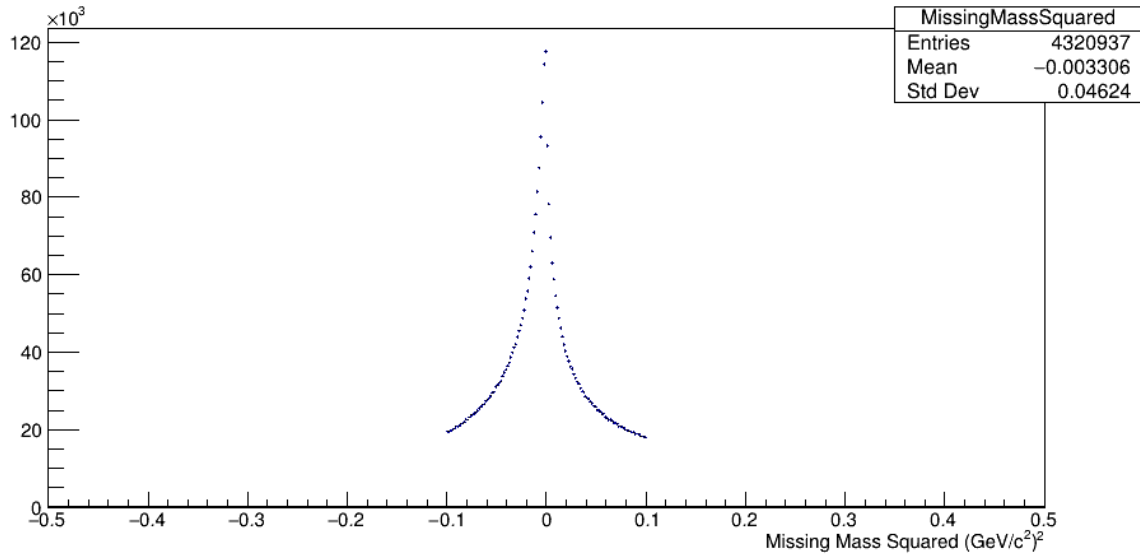
Cut Applied: $E_\gamma > 7.5 \text{ GeV}$, $52 \text{ c.m} < Z_{\text{vertex}} < 78 \text{ c.m}$



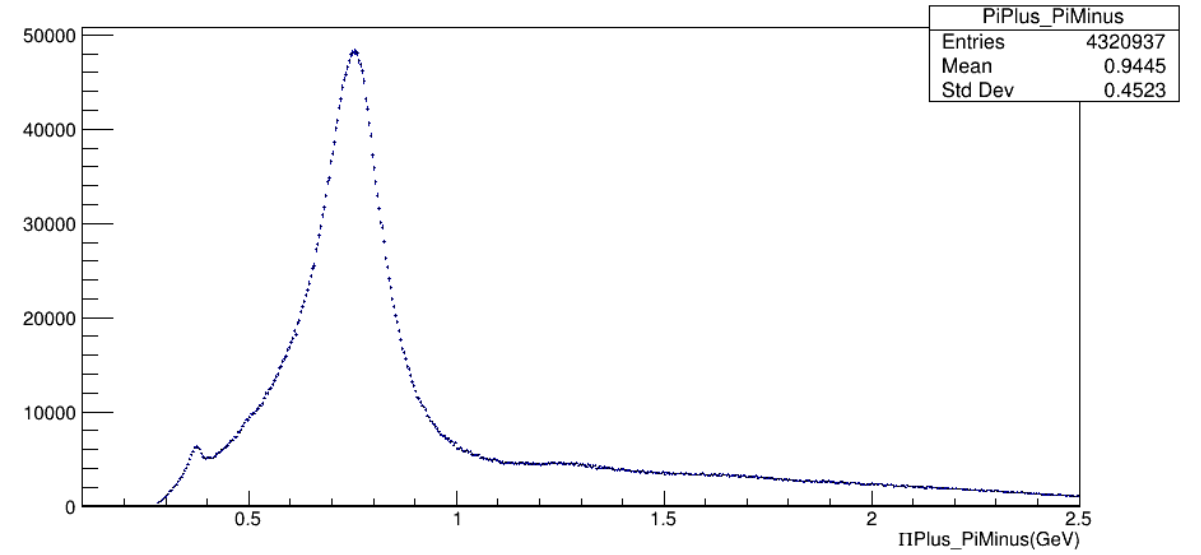
$E_\gamma > 7.5 \text{ GeV}$, $52 \text{ c.m} < Z_{\text{vertex}} < 78 \text{ c.m}$, $CL > 0.001$, $0.5 < MM2 < 1.5$, $|t| > 1$ and $|u| > 1$, $(\pi^+\pi^-)$ Mass > 1.4 && $(\pi^+\pi^-)$ Mass > 2 , $160 < \Delta(\rho-\rho) < 200$ degree



Reaction 1_14__8_9_14



Cut Applied: $E_\gamma > 7.5$ GeV , $52 \text{ c.m} < Z_{\text{vertex}} < 78 \text{ c.m}$



$E_\gamma > 7.5$ GeV , $52 \text{ c.m} < Z_{\text{vertex}} < 78 \text{ c.m}$, $CL > 0.001$, $|t| > 1$ and $|u| > 1$, (π^+p) Mass > 1.4 && (π^-p) Mass > 2 , $160 < \Delta(\rho-p) < 200$ degree

