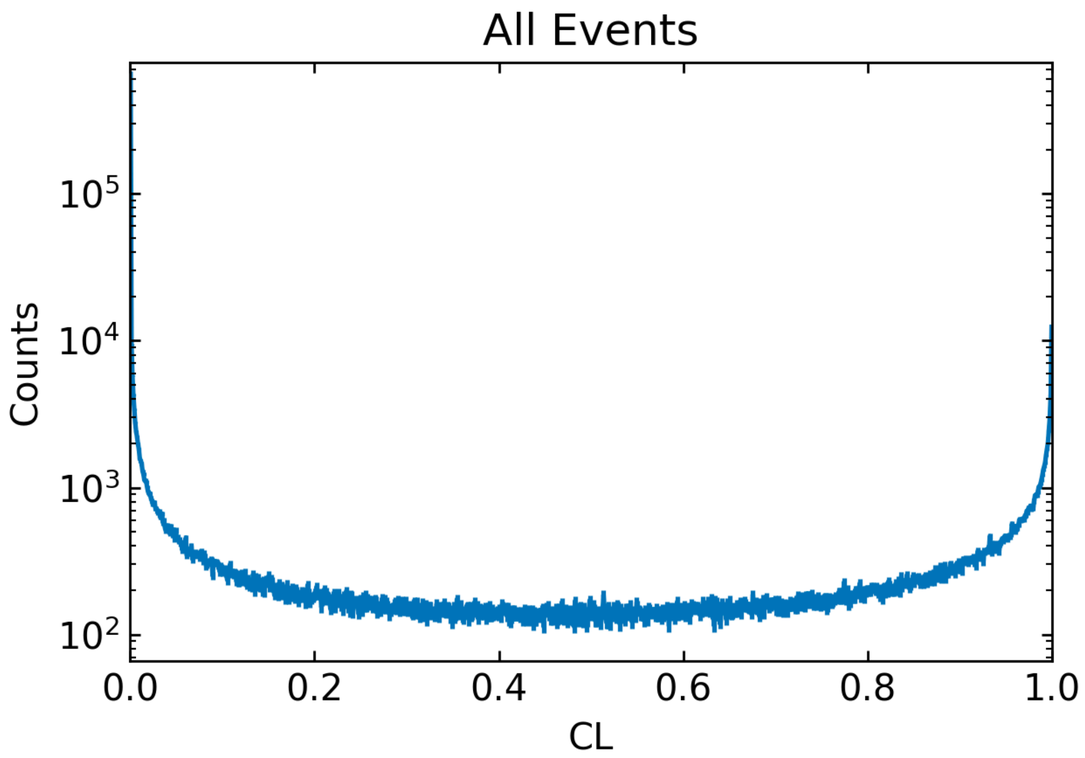
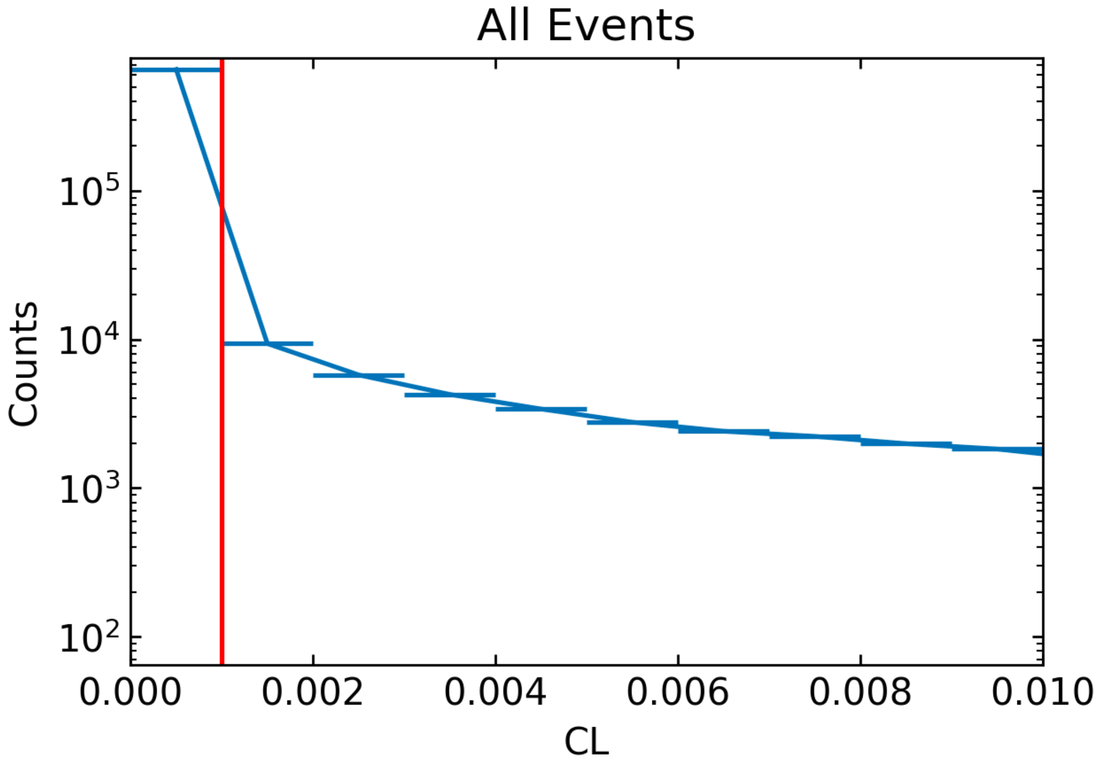
$\gamma(n, \rho^- p)$ Channel

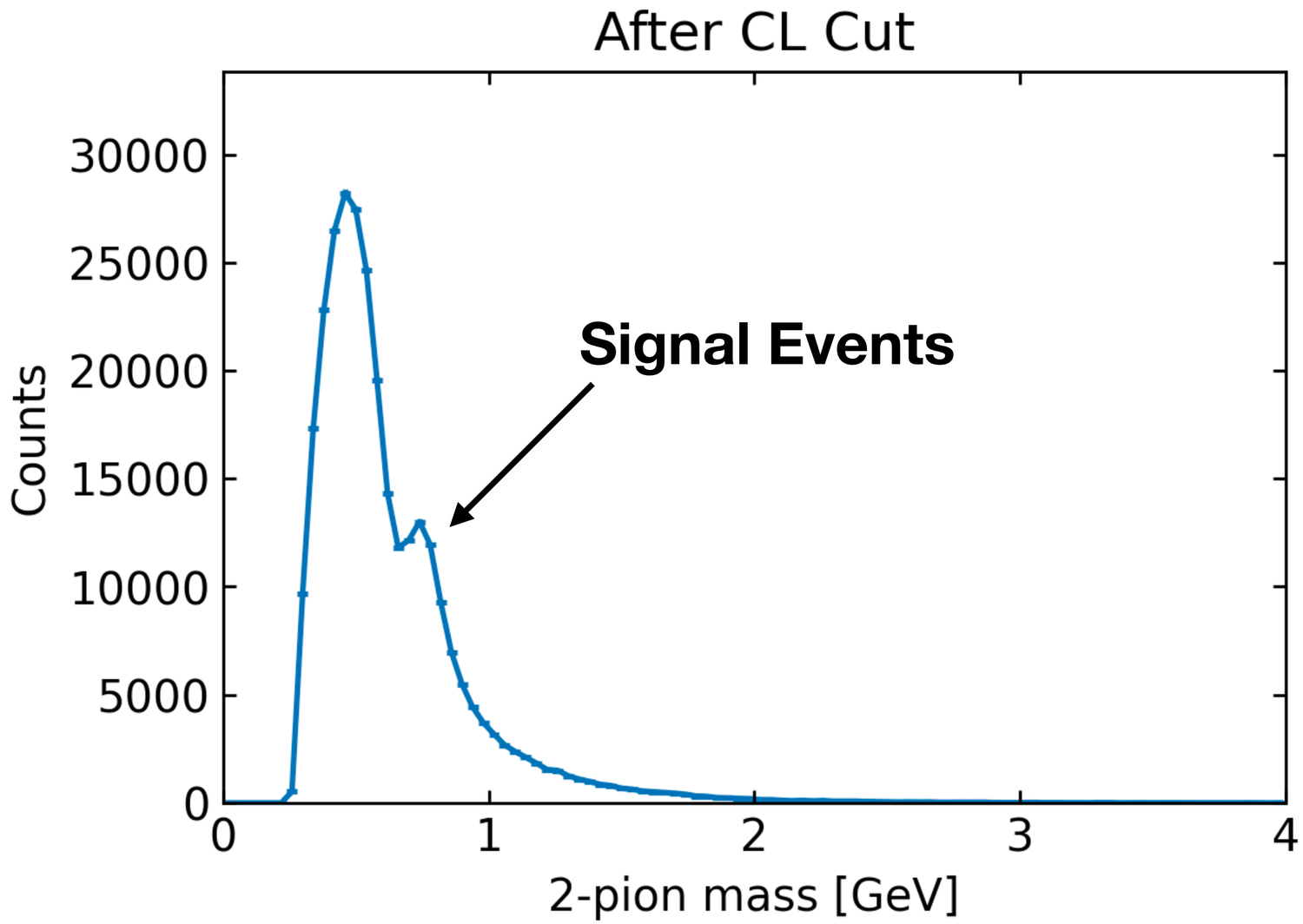
- 1 positive + 1 negative charged track, 2 neutral showers
- Kinematic fit:
  - Common vertex position
  - $m_{\gamma\gamma} = m_{\pi^0}$

Cut on CL>0.001

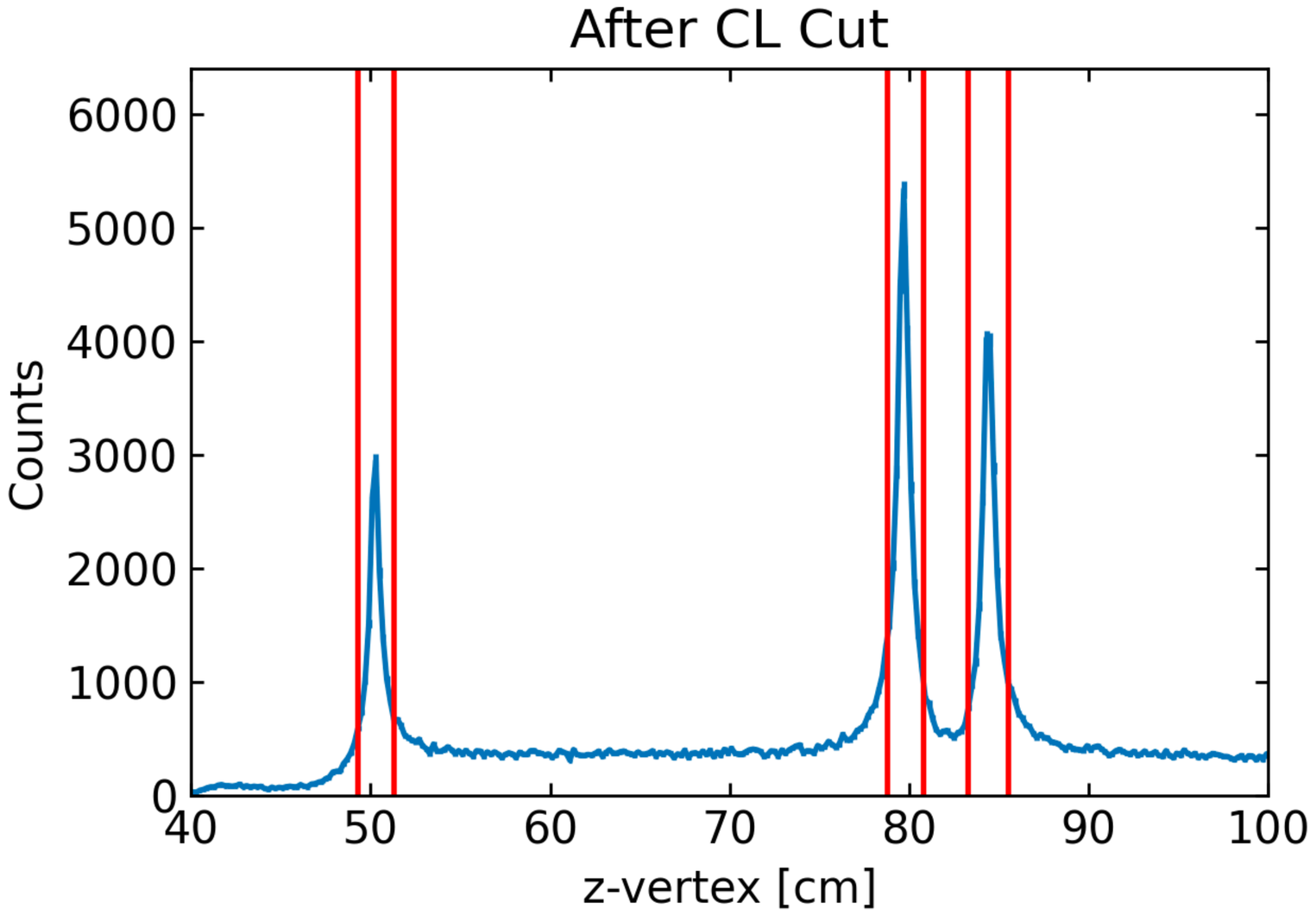




2-Pion Mass Spectrum

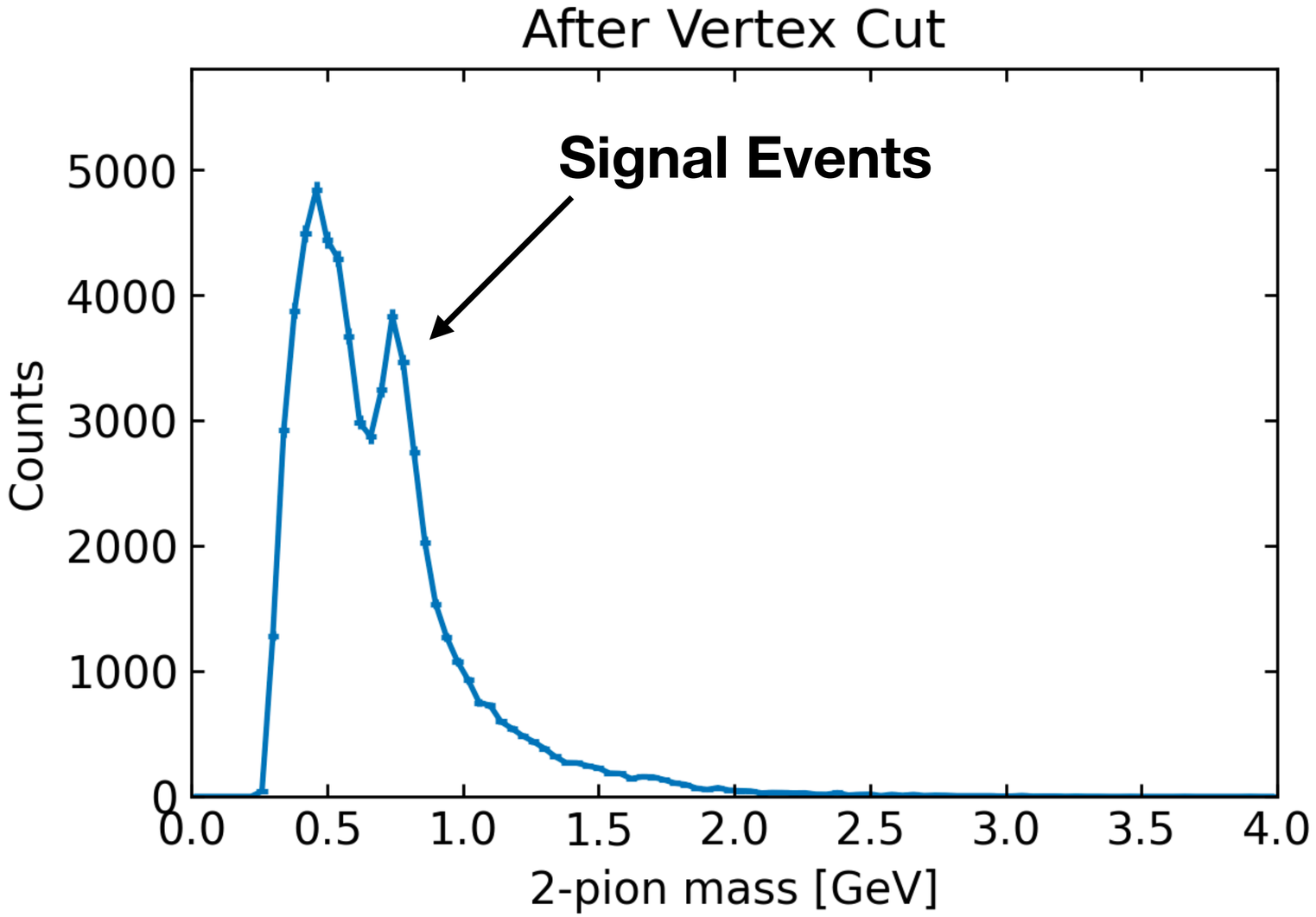


Z-Vertex Spectrum



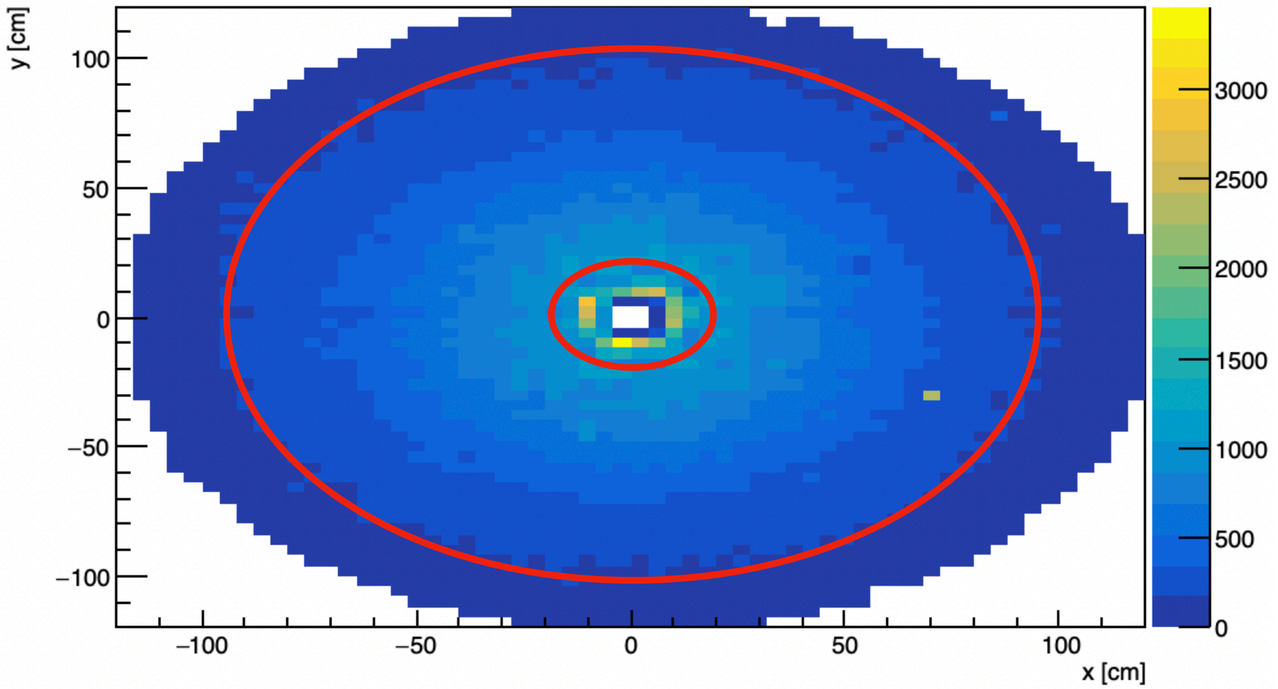
Also r<1 cm

Mass Spectrum After Vertex Cut

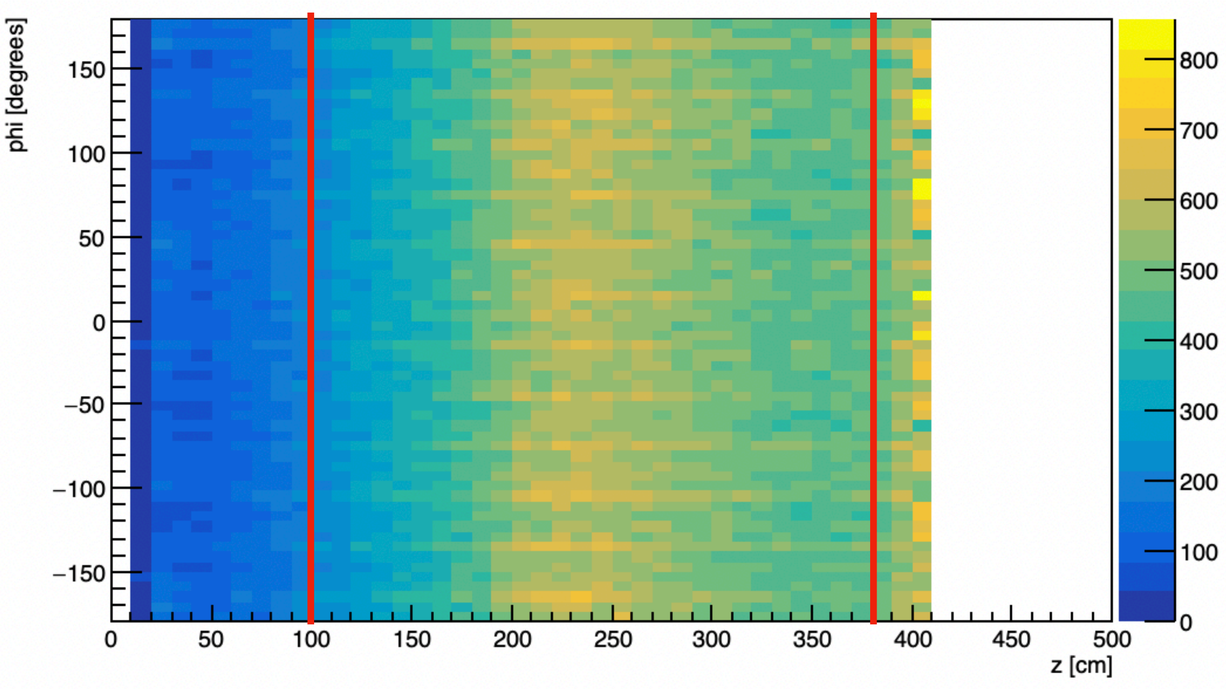


Neutral Shower Position Cuts

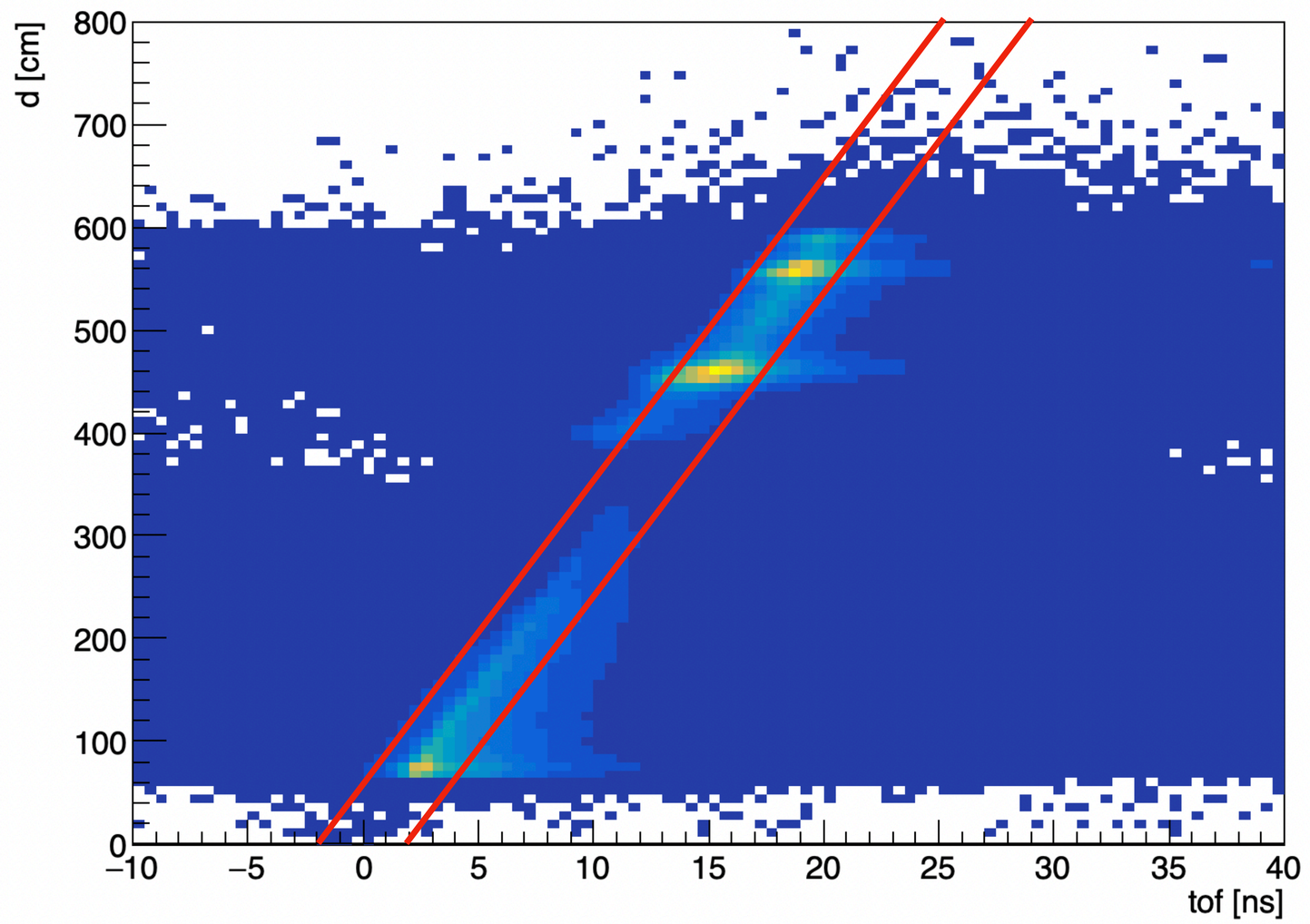
FCAL



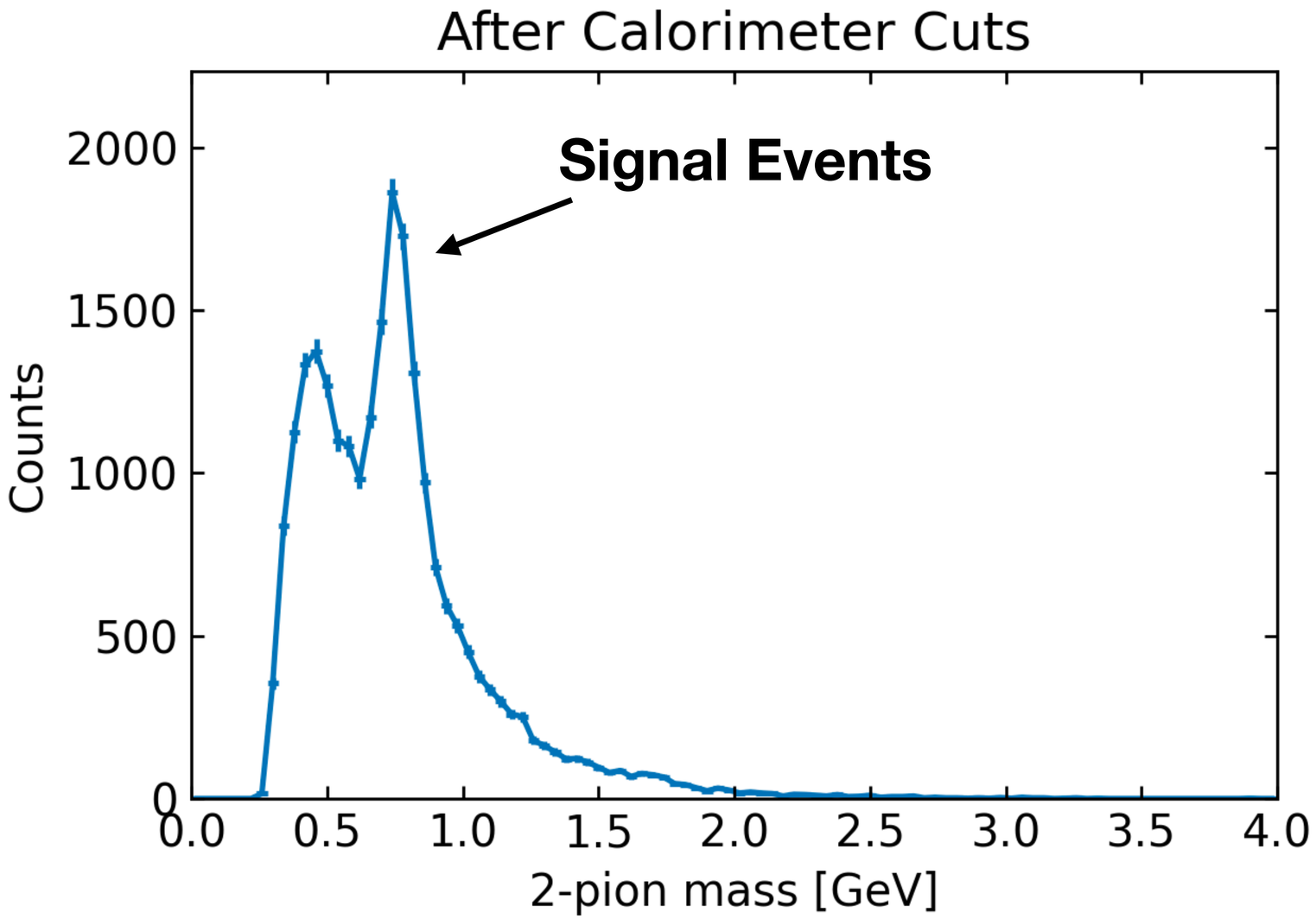
BCAL



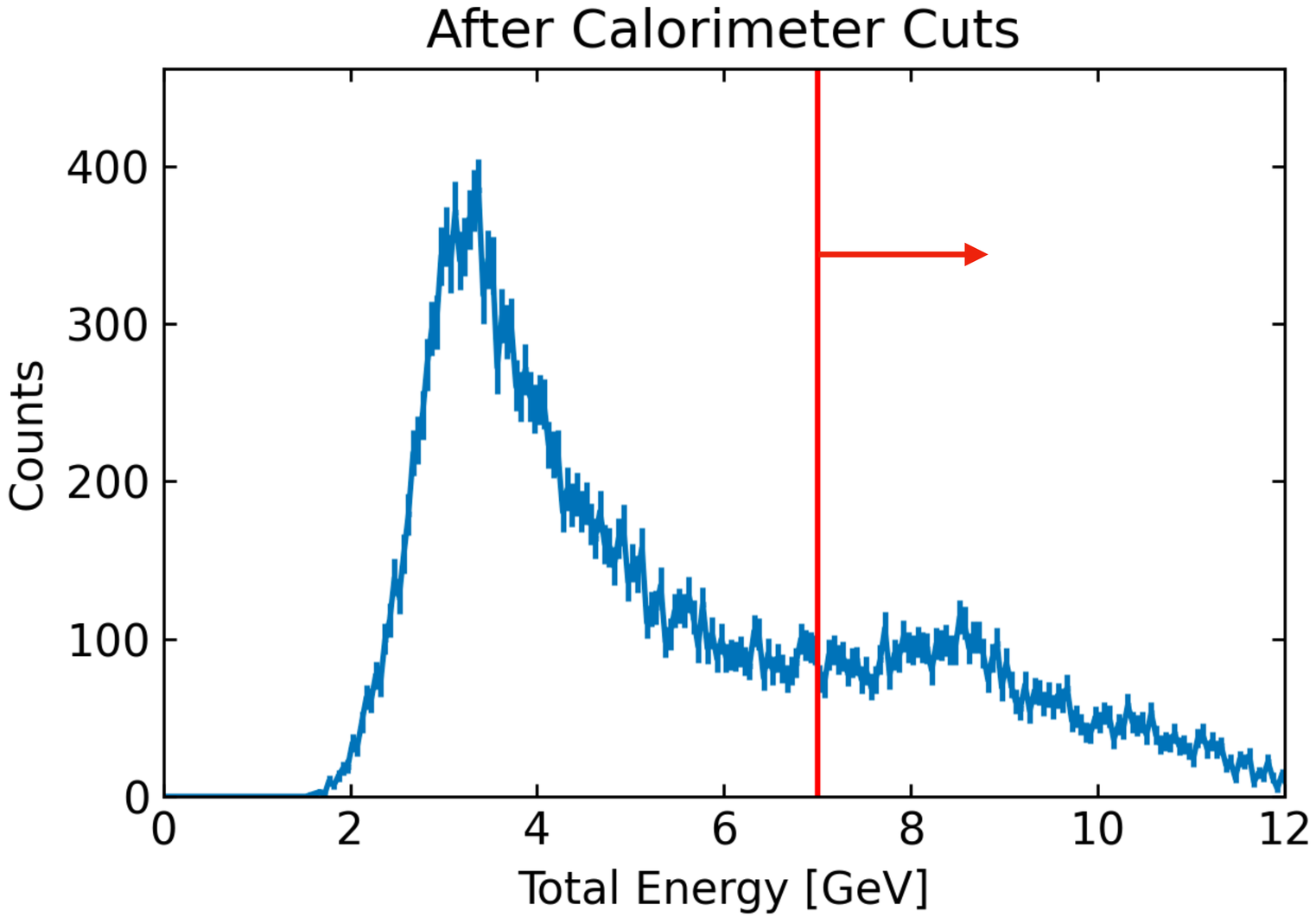
Neutral Shower Timing Cuts



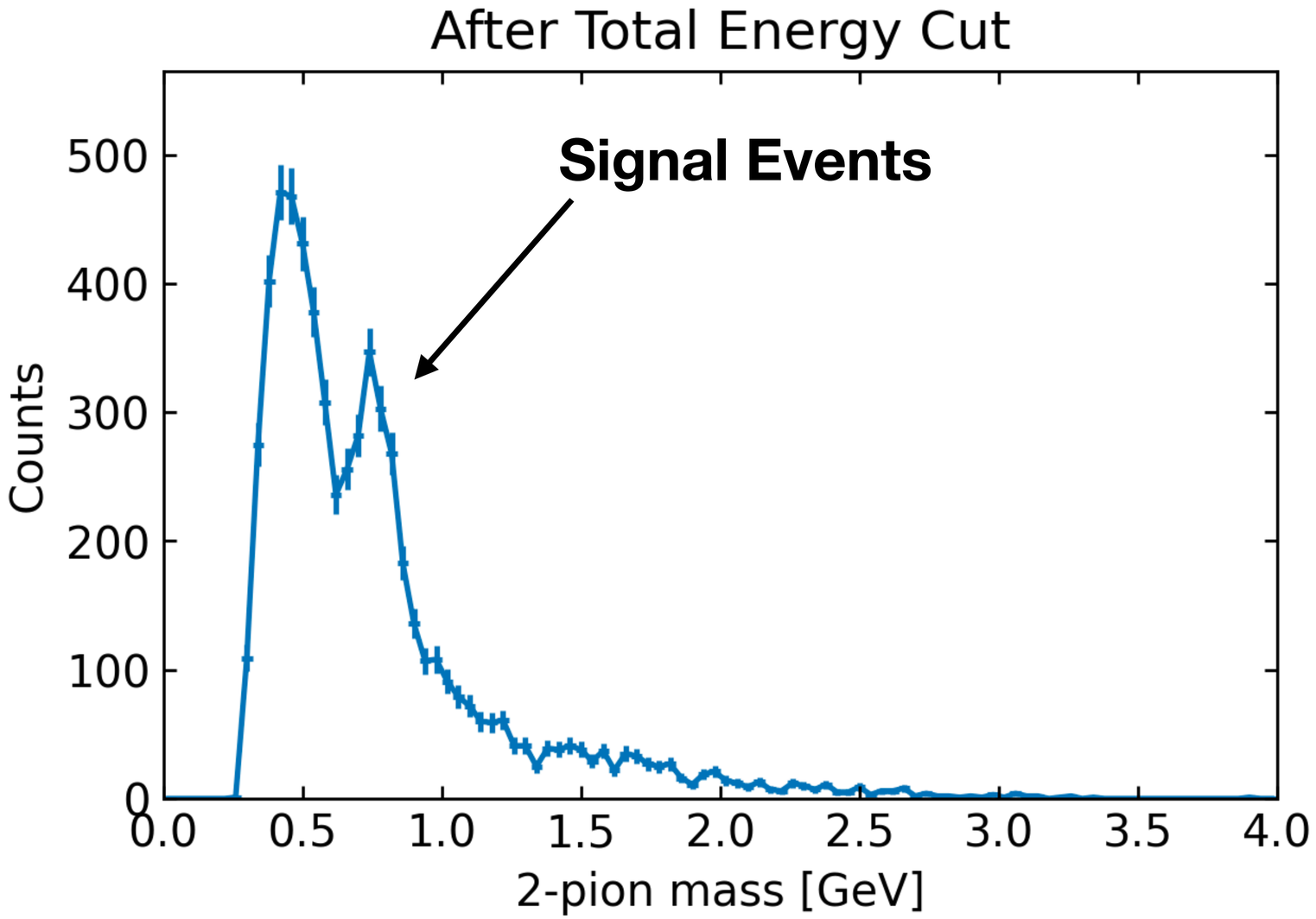
Mass Spectrum After Calorimeter Cuts



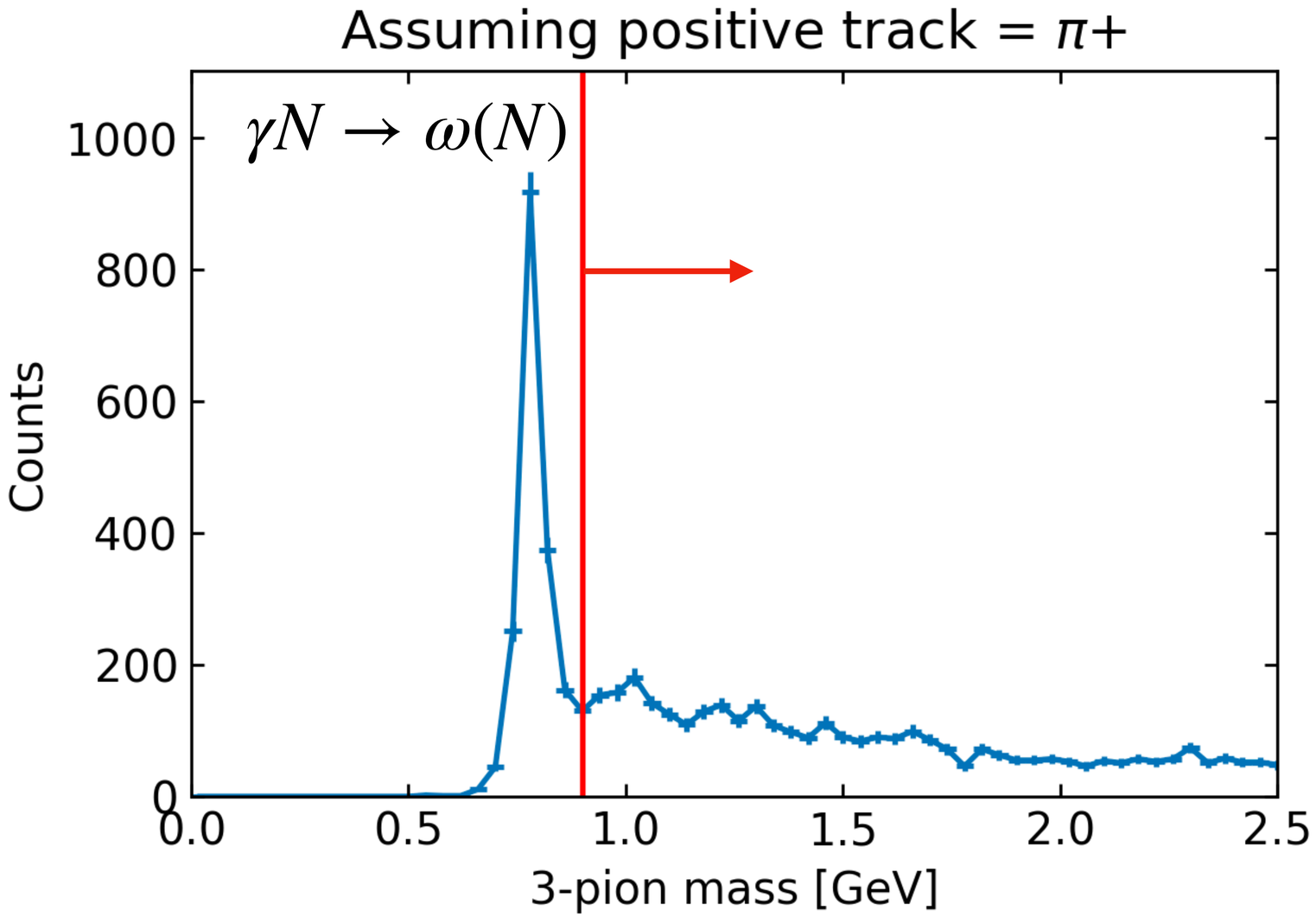
Measured Energy Spectrum



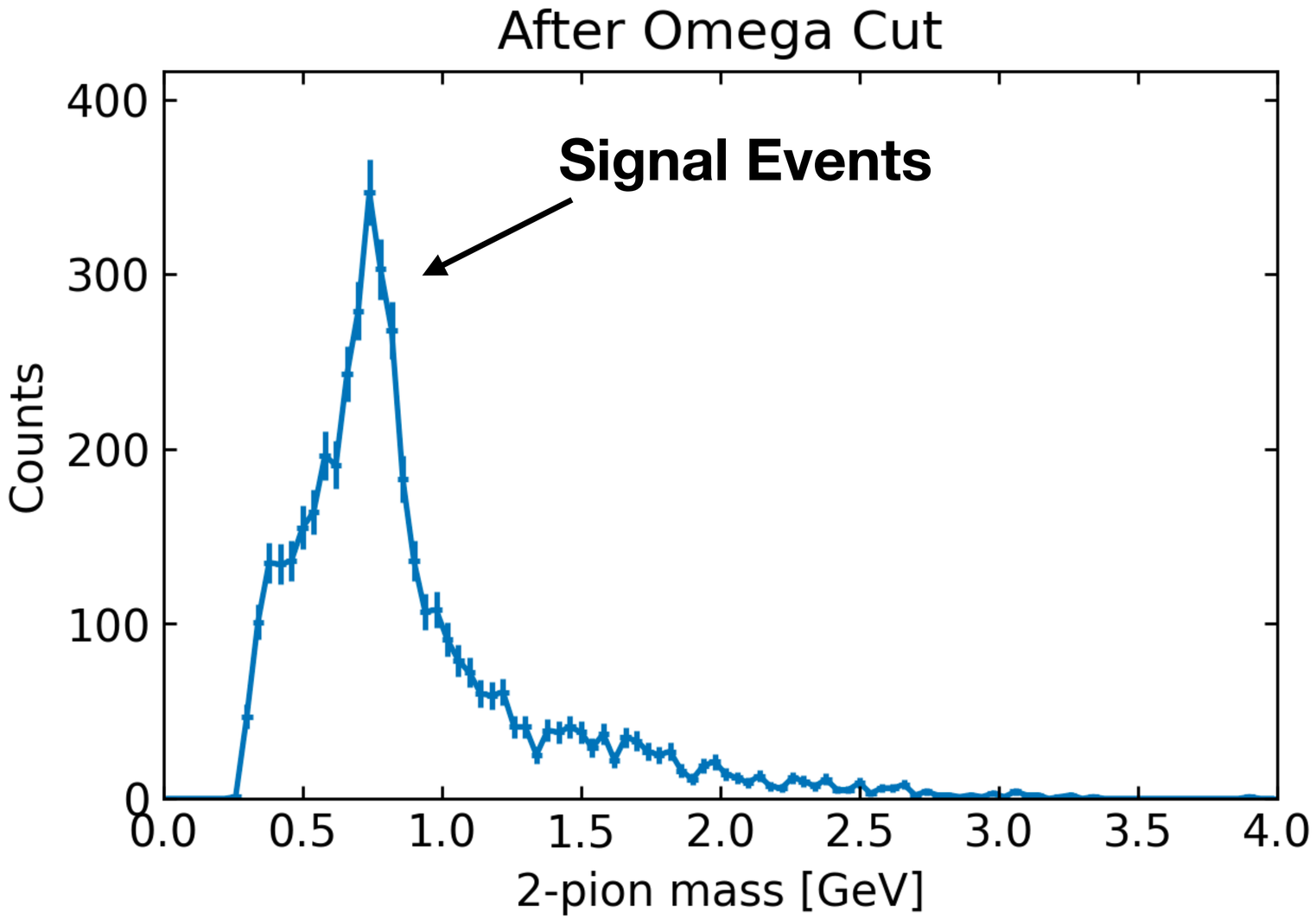
Mass Spectrum After Energy Cut



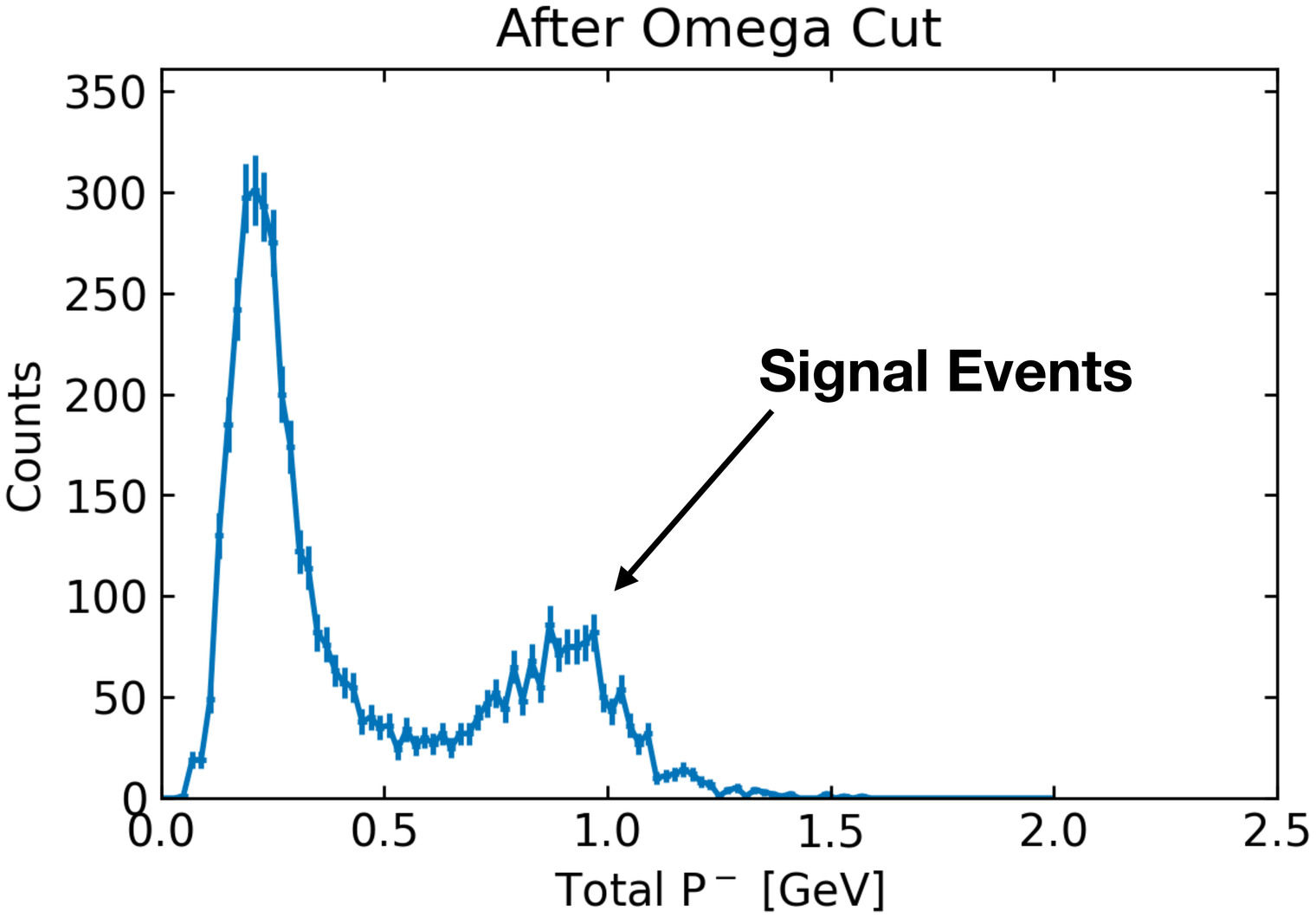
Examine possibility of π^+ track



Mass Spectrum After Omega-Background Cuts

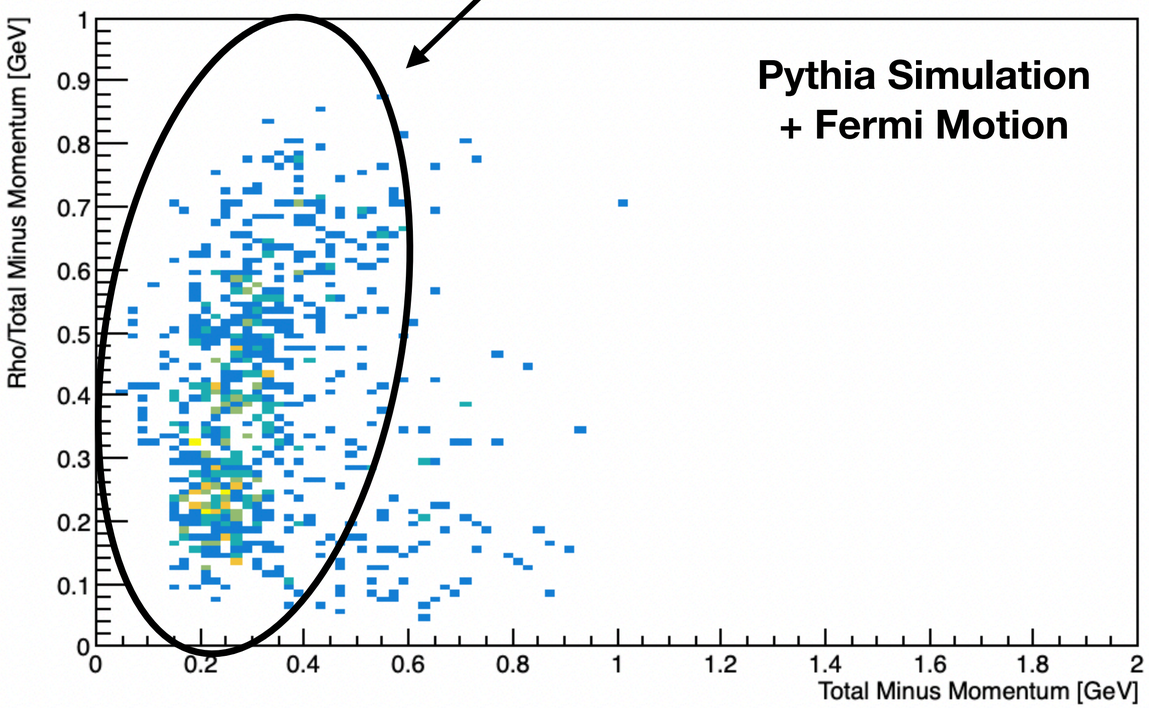


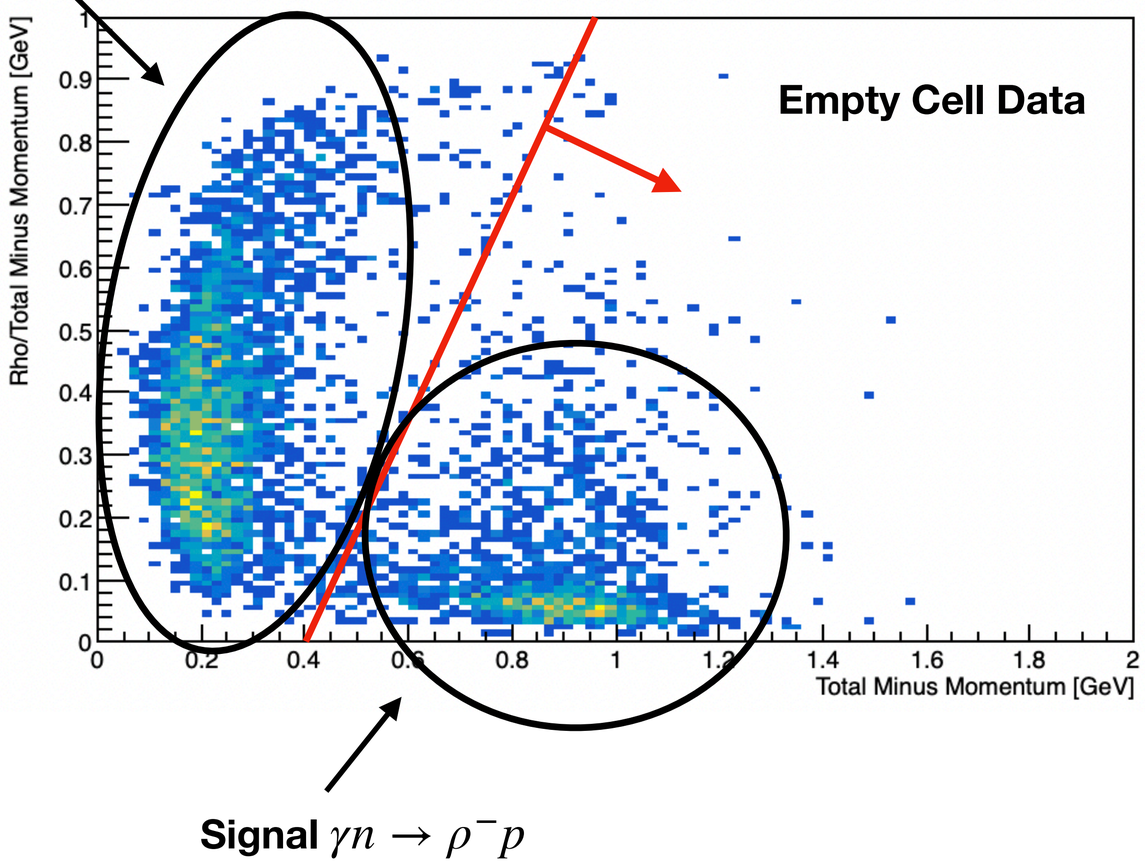
Low-p^- background



Background fairly well-separated, but still needs further study

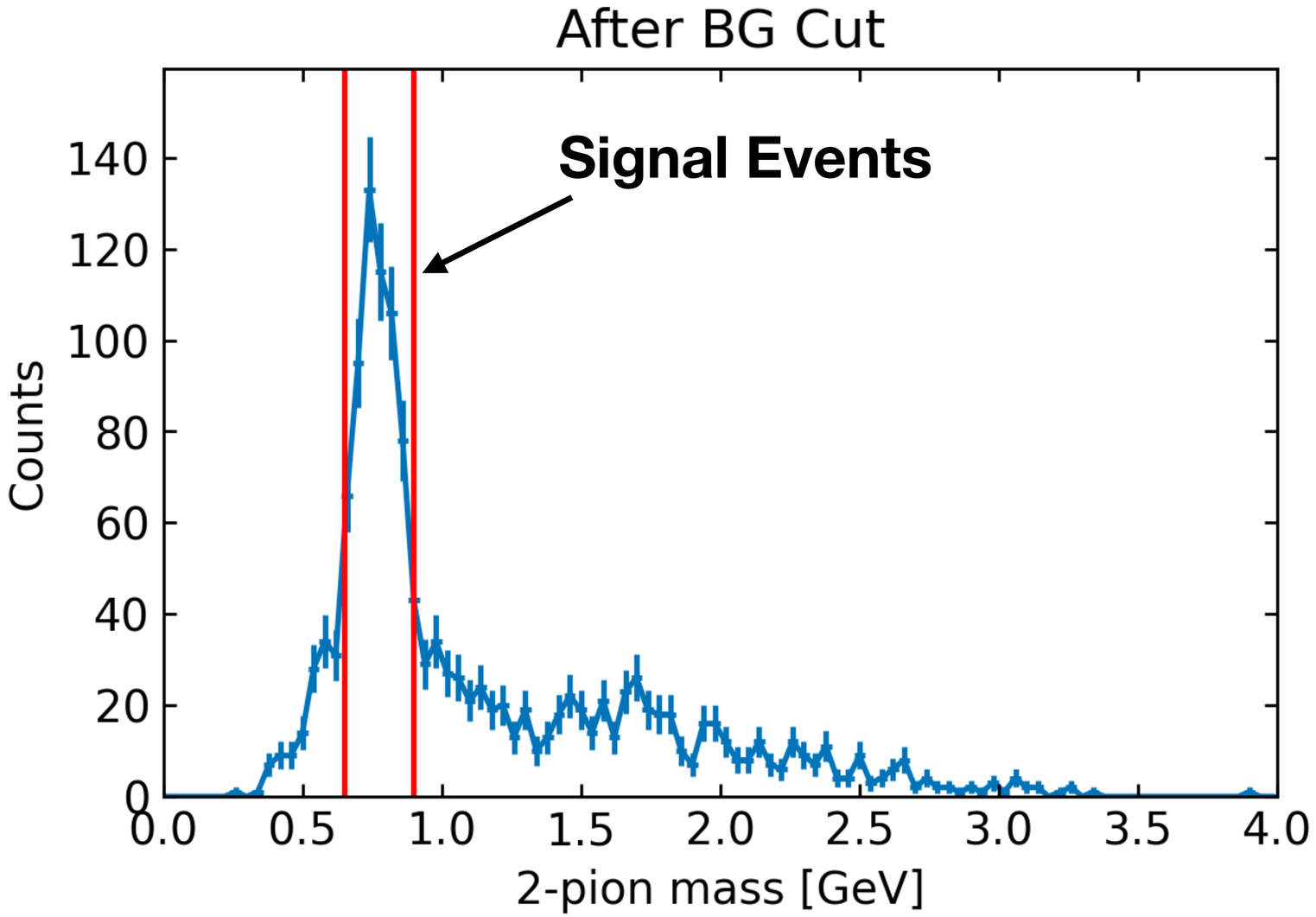
Background $\gamma n \rightarrow \pi^+\pi^-\pi^0 n$



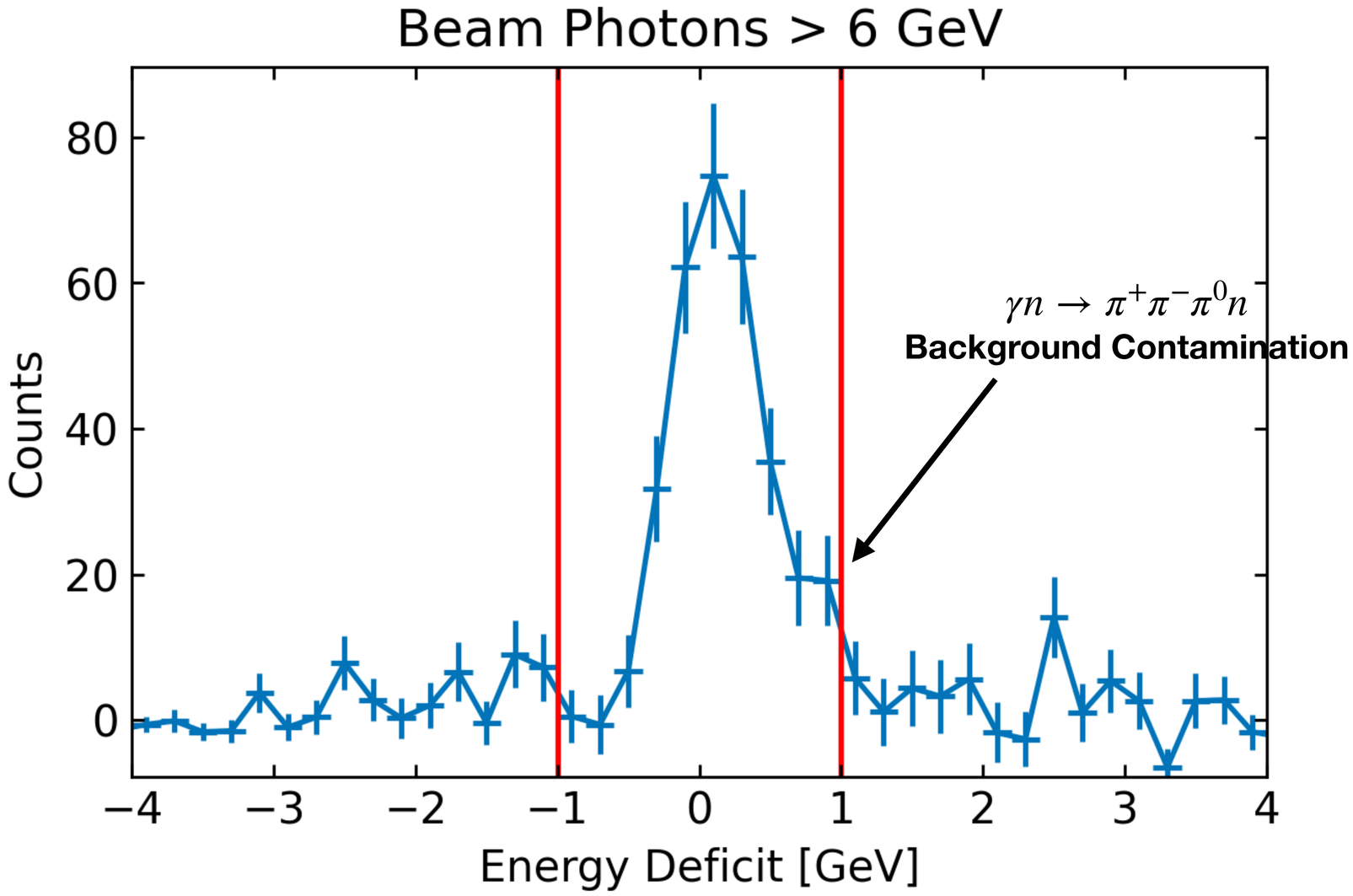


Signal $\gamma n \rightarrow \rho^- p$

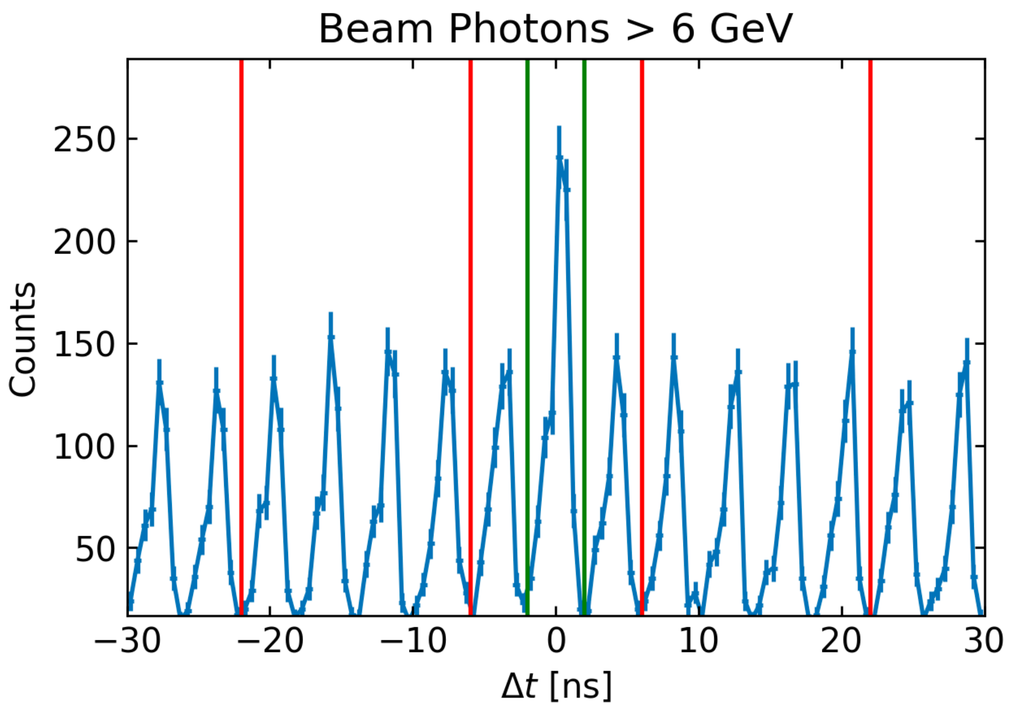
Mass Spectrum After 3π Background Cuts

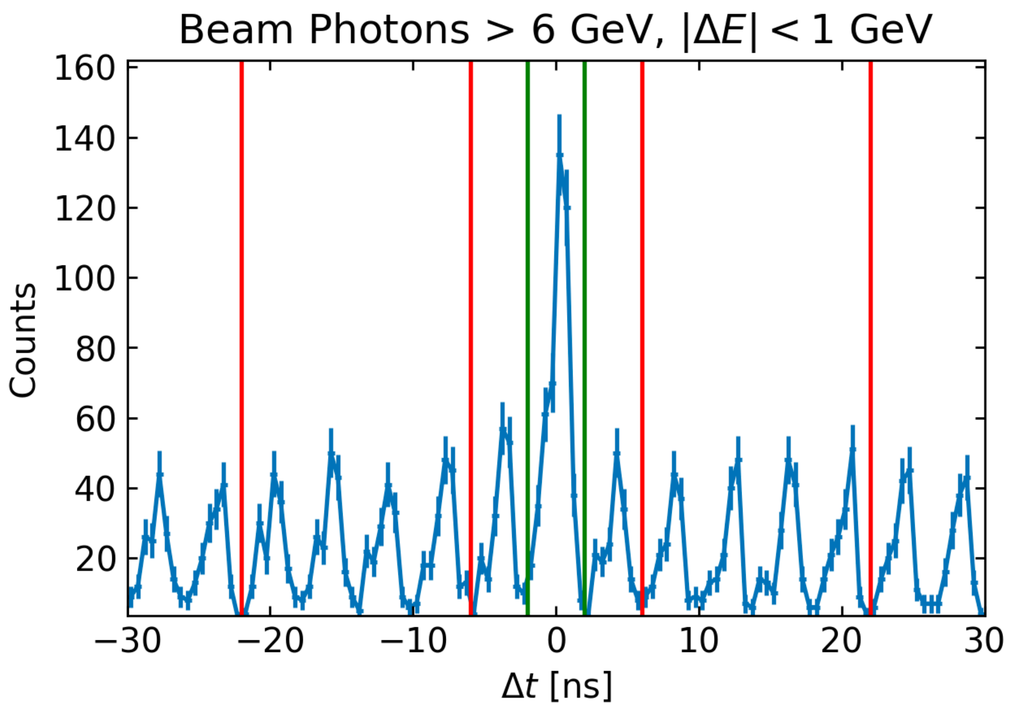


Energy Deficit (assuming standing neutron)

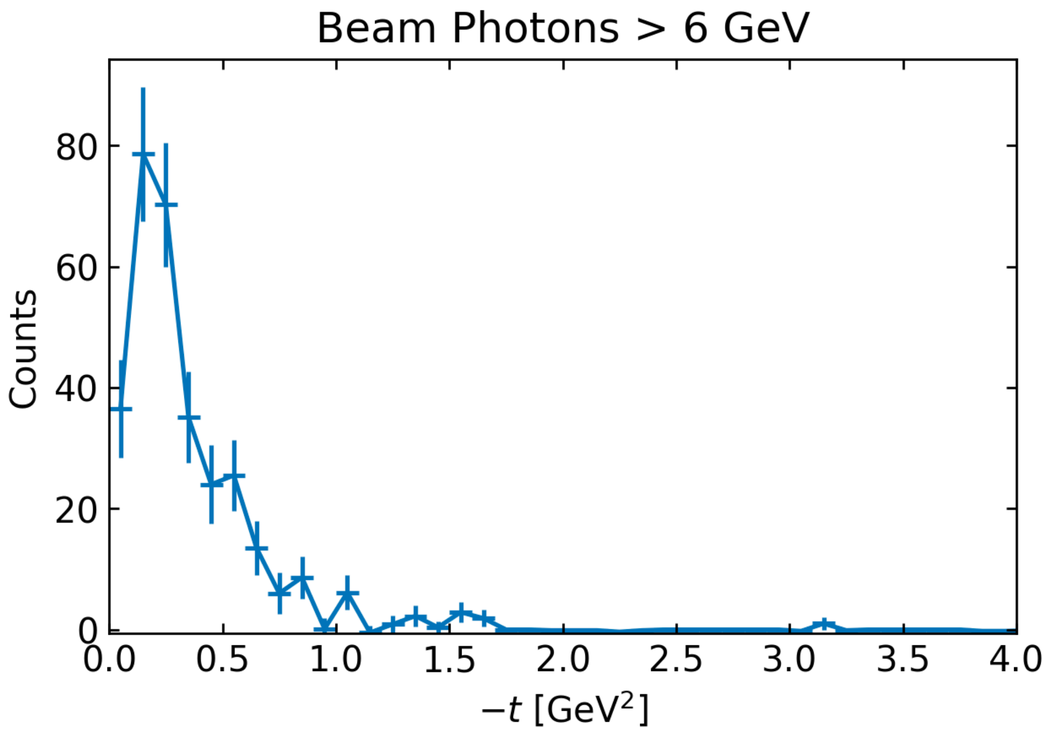


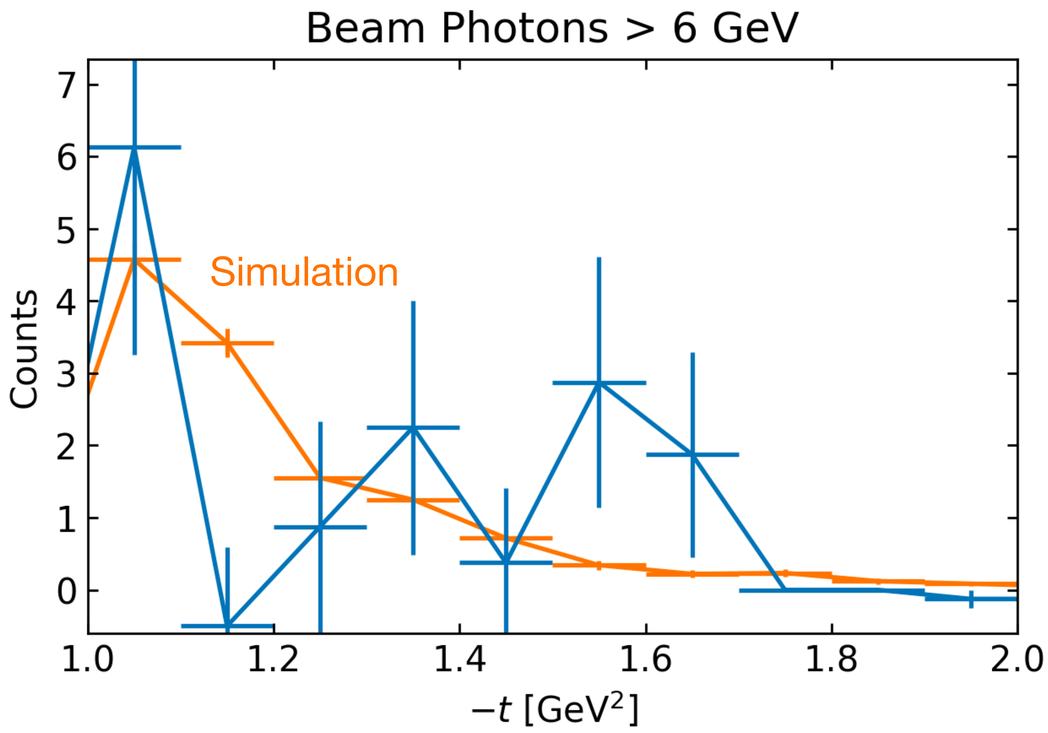
Beam Photon Timing





Events fall rapidly with $|t|$





k_{miss} Spectrum