

\mathcal{A} and \mathcal{E} Searches

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Background

- Skim 11 data set used:

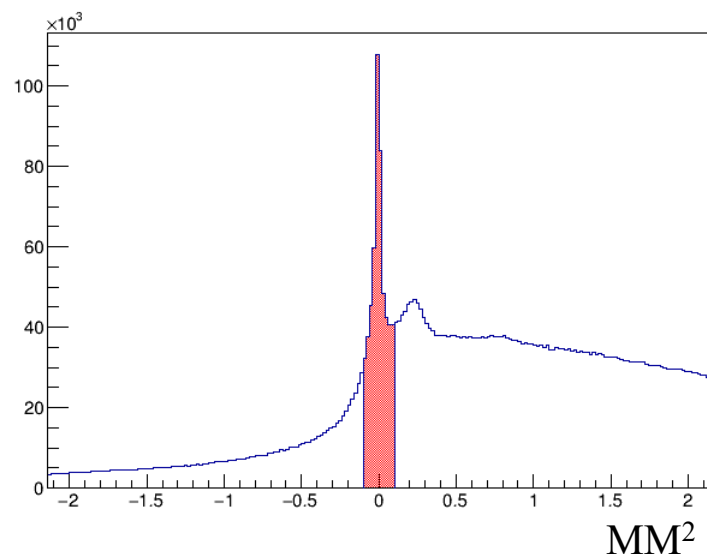
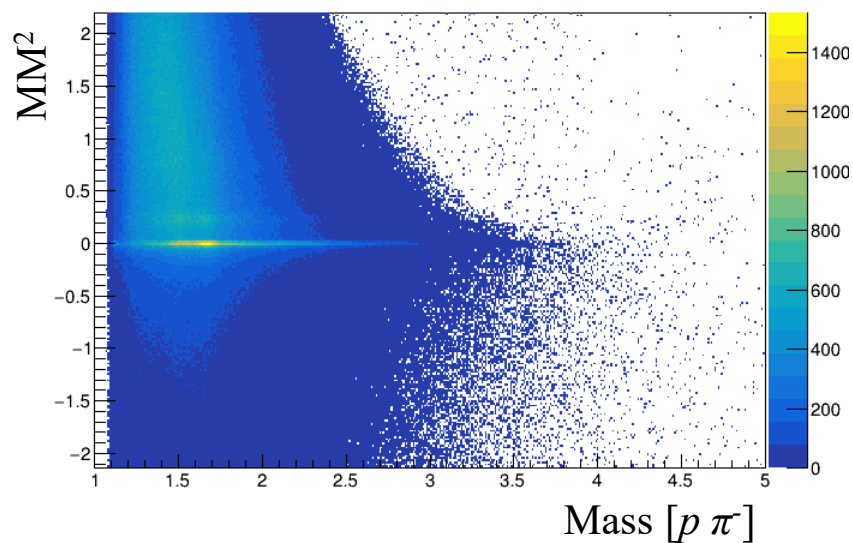
/cache/clas12/rg-a/production/recon/fall2018/torus-
1/pass1/v0/dst/train/skim11/

- Trigger particle is an electron in the Forward Tagger
- Geraint's FT electron correction used:

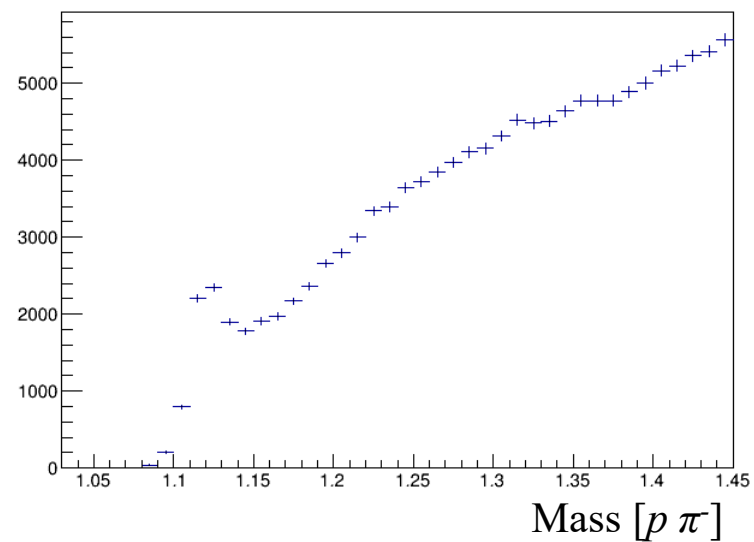
$$E' = E - (.0004)E^4 + (.0071)E^3 - (.0432)E^2 + (.1356)E - .0257$$

- No extra charged particles allowed in reaction
- No corrections used for hadrons
- No momentum cuts made

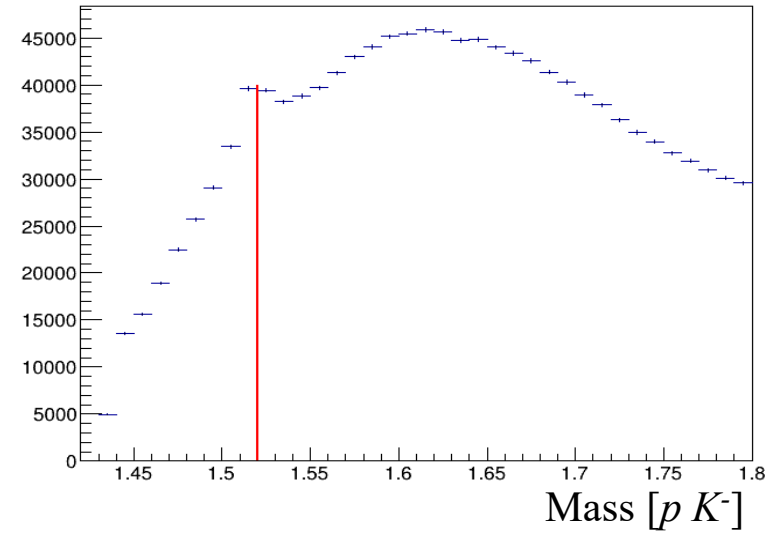
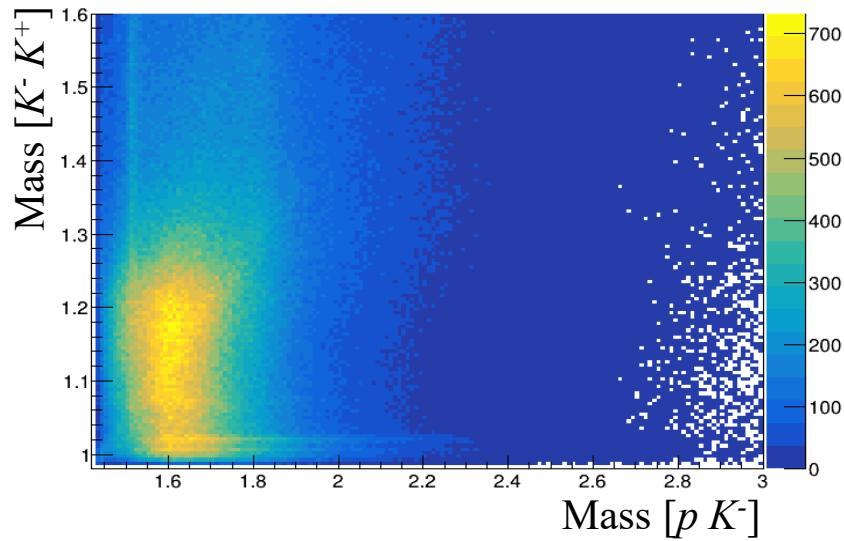
Λ Search Using $[\gamma p \rightarrow \Lambda K^+ \rightarrow p \pi K^+]$



- Total missing mass² cut made at $.1\text{GeV}^2$
- K^+ hit in the Forward Detector

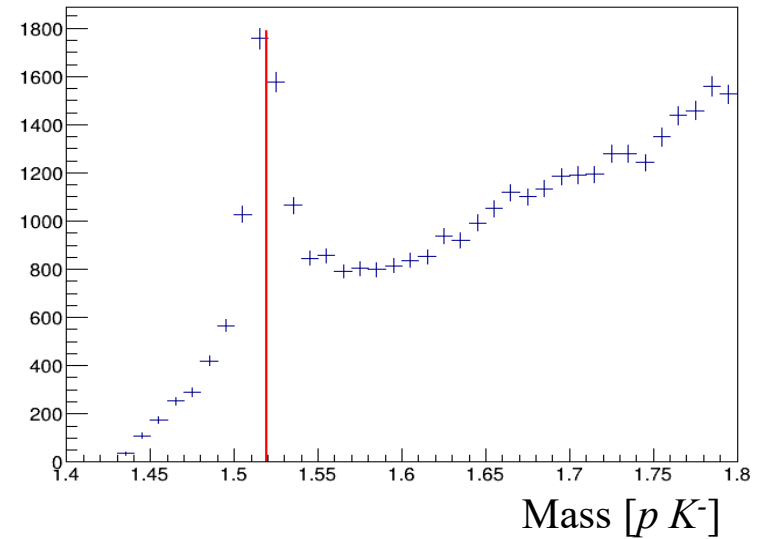
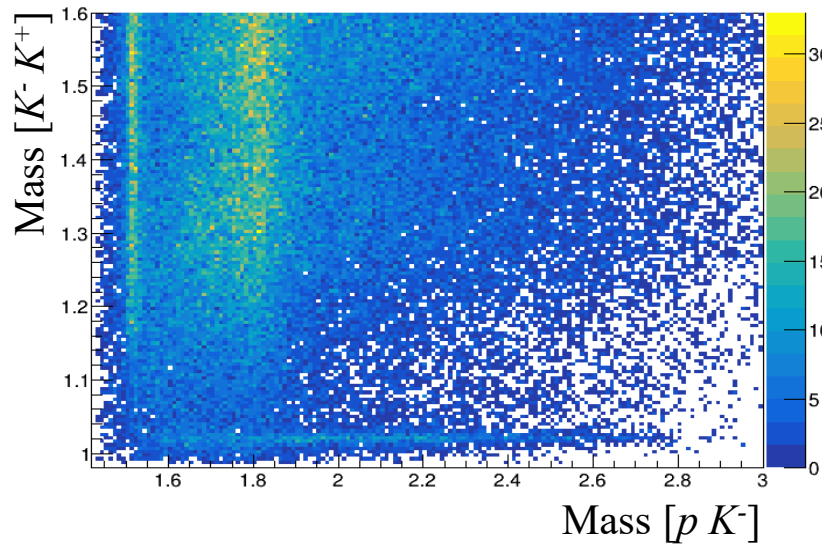


Λ^* Search Using $[\gamma p \rightarrow \Lambda^* K^+ \rightarrow p K^- K^+]$

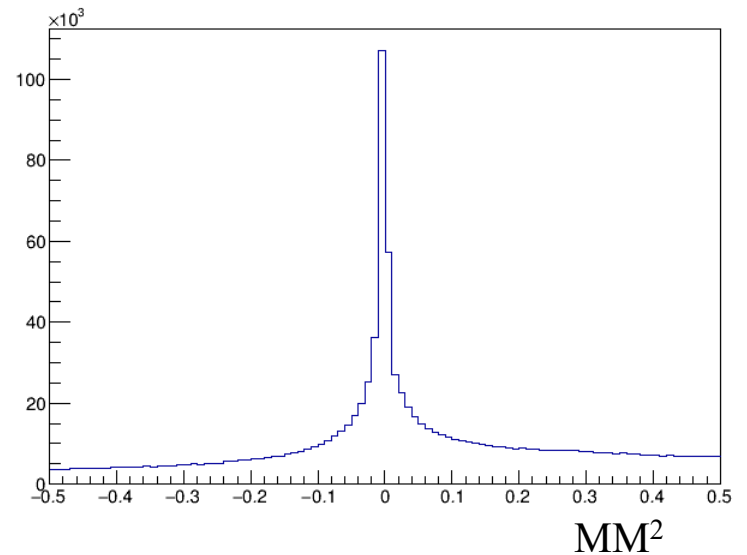


- Without missing mass² cut

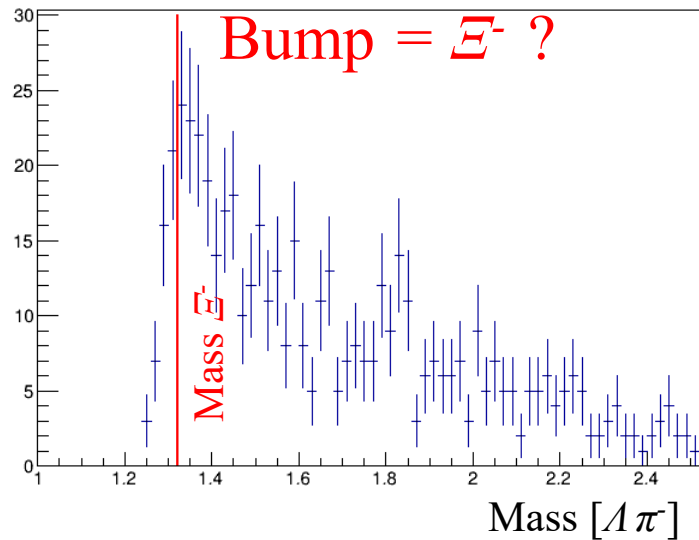
Λ^* Search Using $[\gamma p \rightarrow \Lambda^* K^+ \rightarrow p K^- K^+]$ (continued)



- Total missing mass² cut made at .02GeV²
- Mass [K⁻ K⁺] > 1.04GeV



Ξ^- Search Using $[\gamma p \rightarrow \Xi^- K^+ K^+ \rightarrow \Lambda \pi^- K^+ K^+]$



- Total missing mass² cut made at 1GeV^2
- Λ constructed using: $p \pi$
- Mass [Λ] < 1.15GeV