

Preliminary cross sections for $\bar{E}(1530) \rightarrow \bar{E}\pi$

Reaction

$$\gamma p \rightarrow K^+ K^+ \Xi^{*-},$$

where

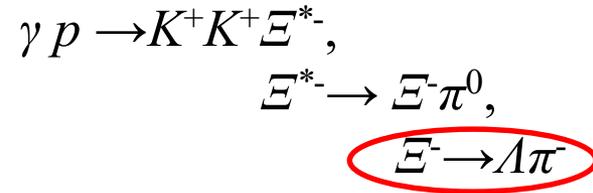
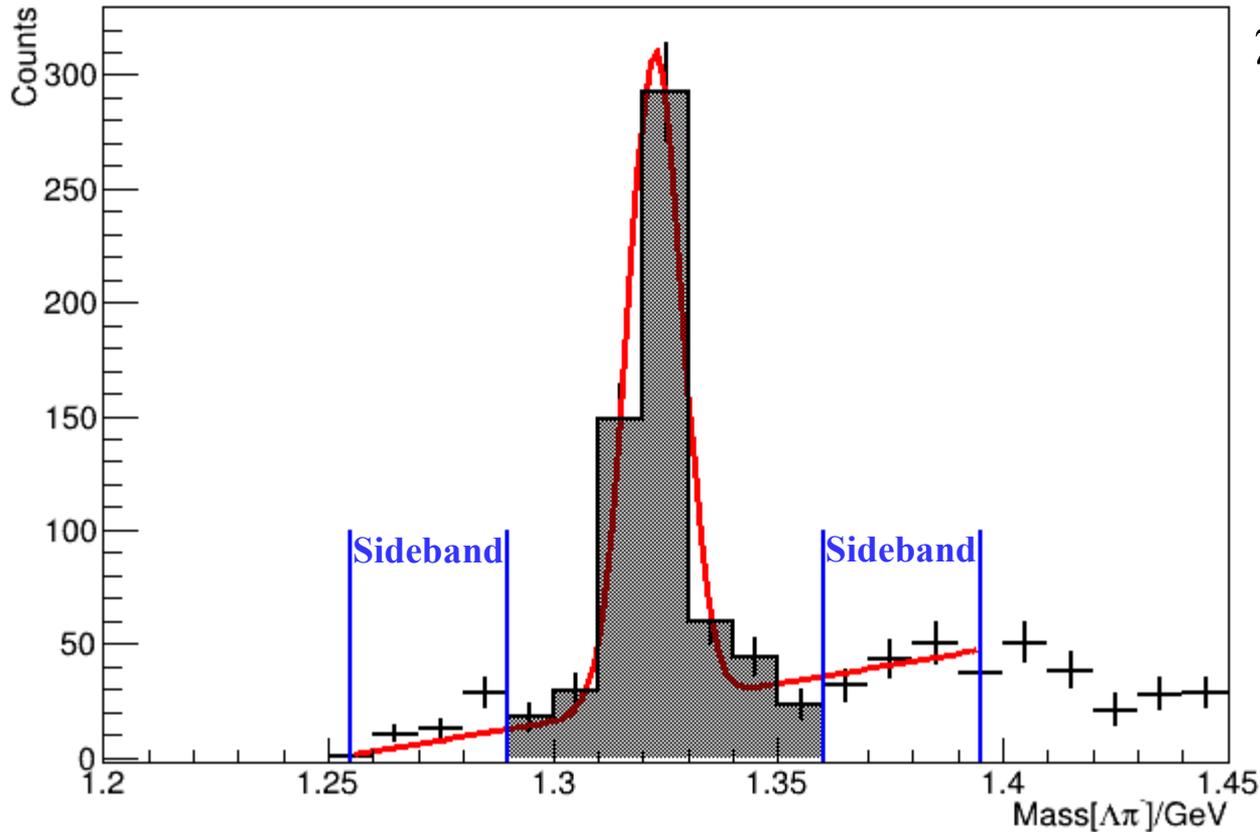
$$\Xi^{*-} \rightarrow \Xi^- \pi^0,$$

$$\Xi^- \rightarrow \Lambda \pi^-,$$

and

$$\Lambda \rightarrow p \pi^-$$

Invariant mass of $\Lambda\pi^-$

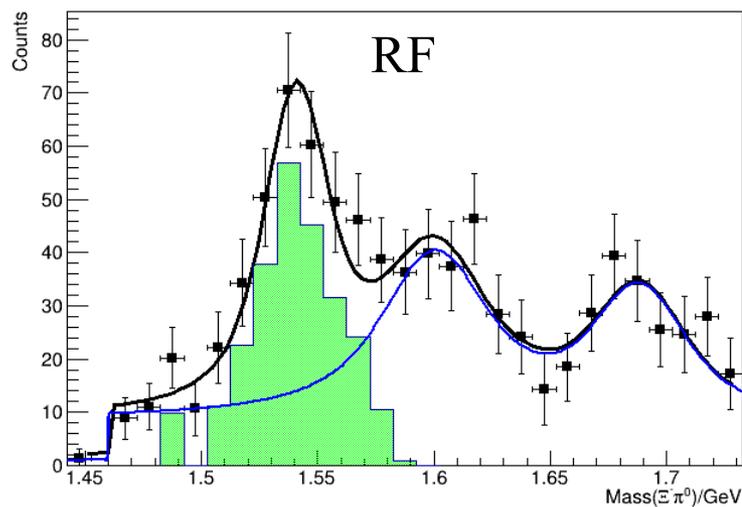
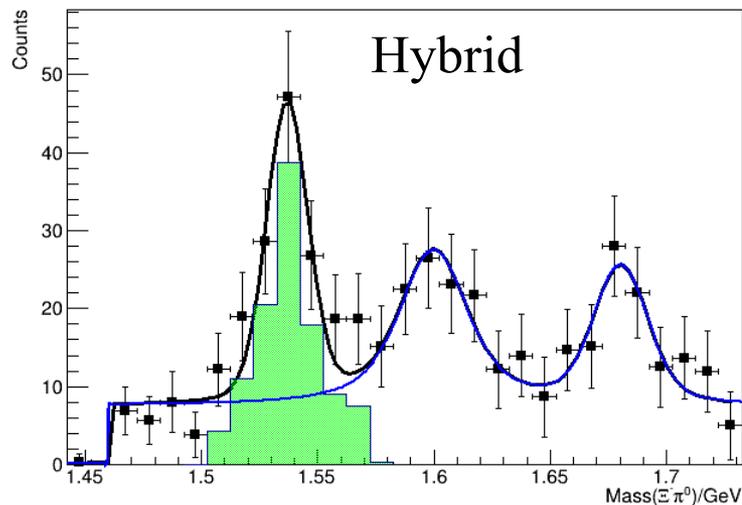


- Hybrid method for accidental subtraction
- CL cut at 10^{-6}
- Significance of \bar{E}^- pathlength > 4
- $|t_{\text{fast}}| < 3 \text{ GeV}^2$
- K^* cut ($0.85 \text{ GeV} < \text{mass}[K^+\pi^0] < 0.95 \text{ GeV}$ removed)

$\Xi\pi$ yield extraction for $E_\gamma = \text{all}$

$$\gamma p \rightarrow K^+ K^+ \Xi^{*-}$$

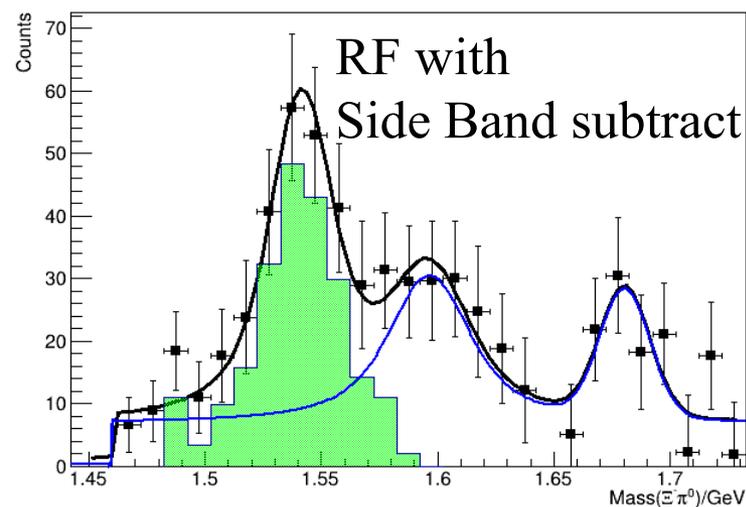
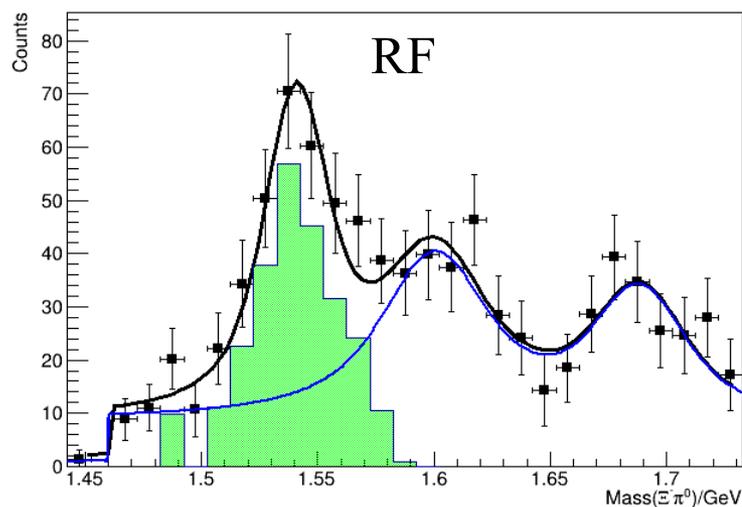
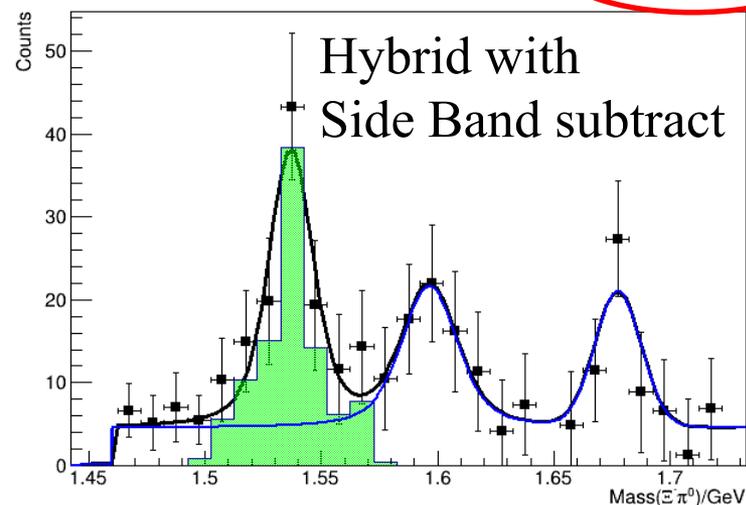
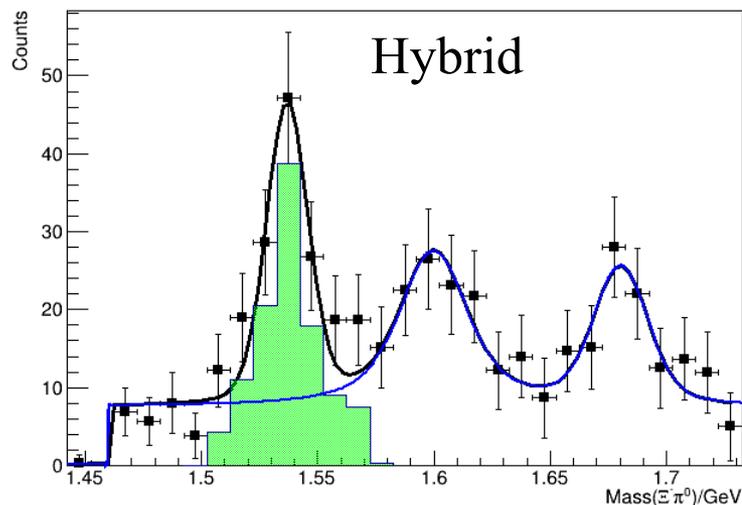
$$\Xi^{*-} \rightarrow \Xi^- \pi^0$$



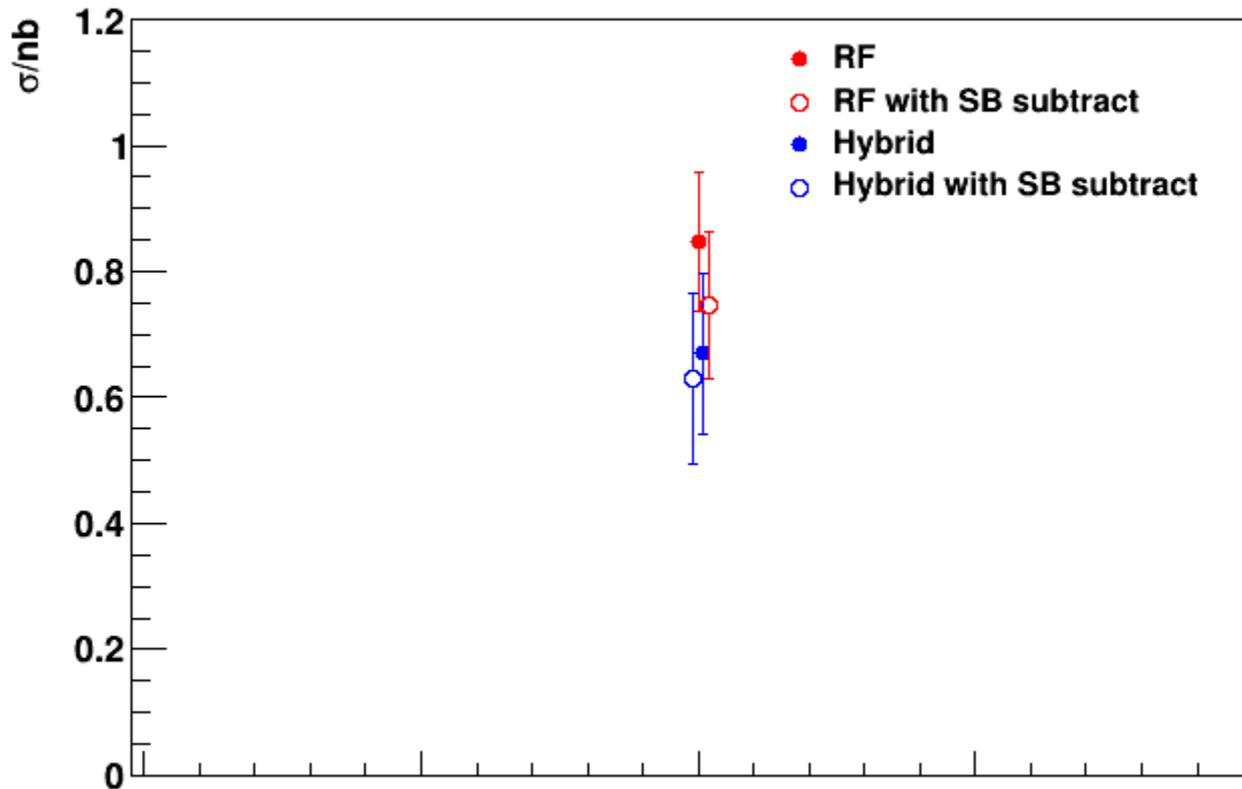
$E\pi$ yield extraction for $E_\gamma = \text{all}$

$$\gamma p \rightarrow K^+ K^+ E^{*-}$$

$$E^{*-} \rightarrow E^- \pi^0$$



$E^-(1530)$ total cross section for $E_\gamma = \text{all}$



$E\pi$ yield extraction binned in E_γ

Two energy bins:

- $7 \text{ GeV} < E_\gamma < 9 \text{ GeV}$
- $9 \text{ GeV} < E_\gamma < 11 \text{ GeV}$

$E\pi$ yield extraction binned in E_γ

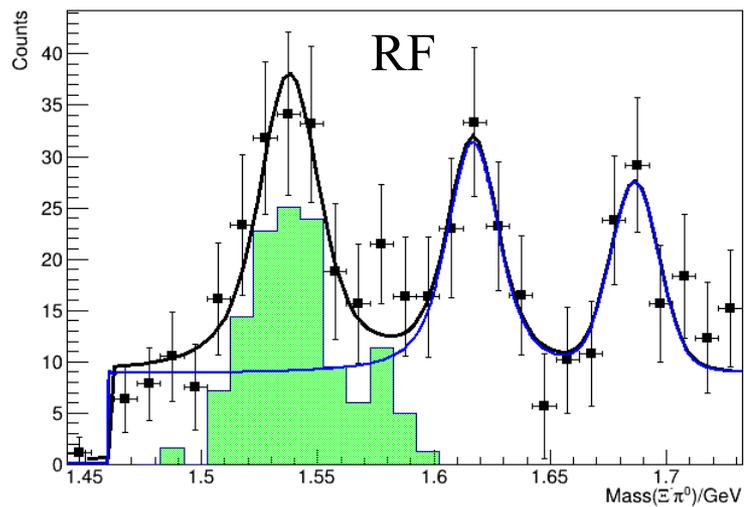
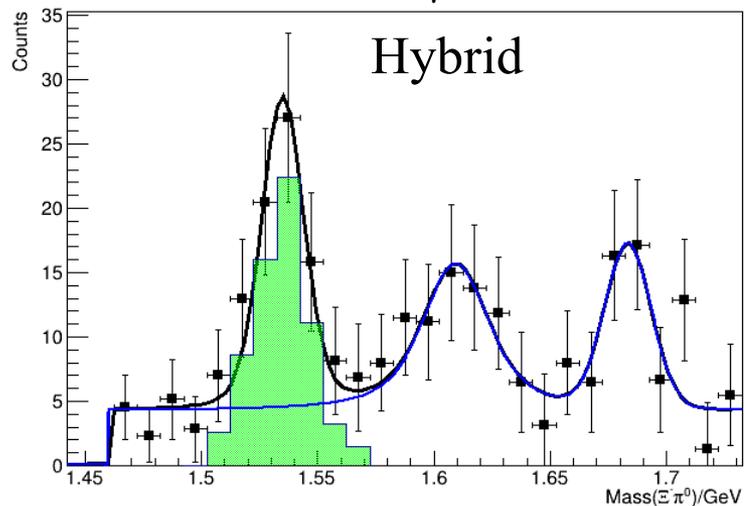
Two energy bins:

- $7 \text{ GeV} < E_\gamma < 9 \text{ GeV}$
- $9 \text{ GeV} < E_\gamma < 11 \text{ GeV}$

Have not perform sideband subtraction yet for results binned in energy

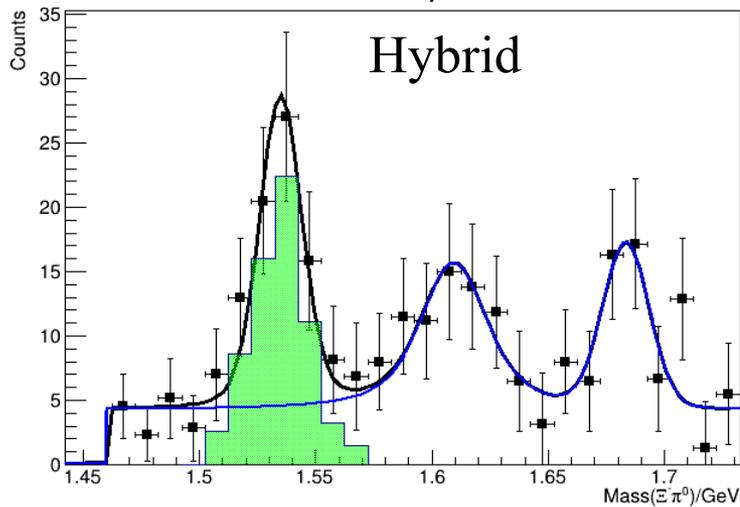
$\Xi\pi$ yield extraction binned in E_γ

$7 \text{ GeV} < E_\gamma < 9 \text{ GeV}$

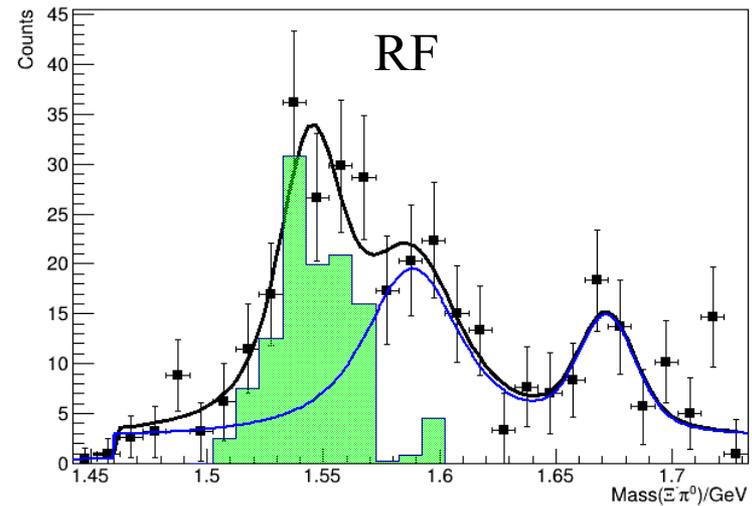
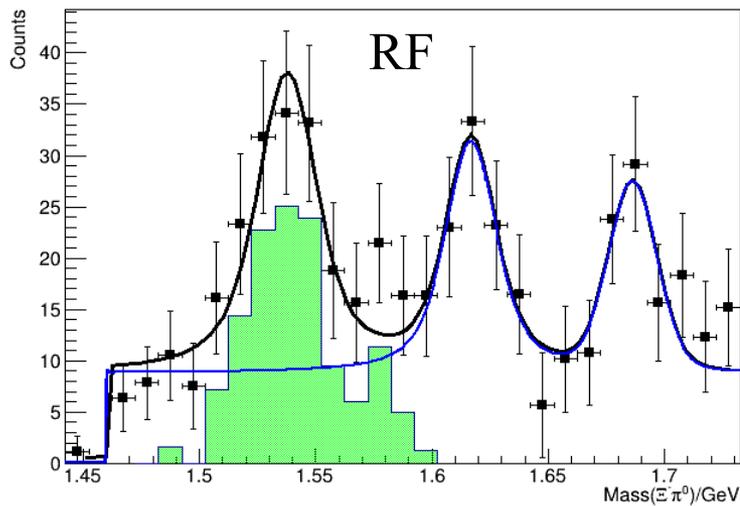
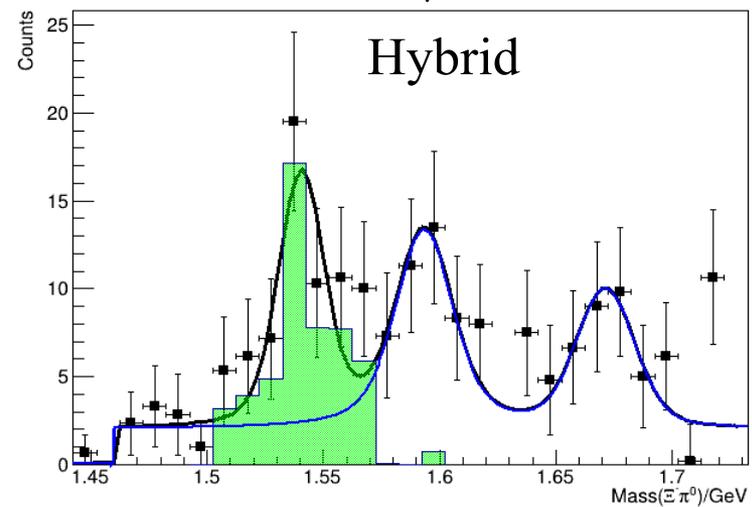


$E\pi$ yield extraction binned in E_γ

$7 \text{ GeV} < E_\gamma < 9 \text{ GeV}$

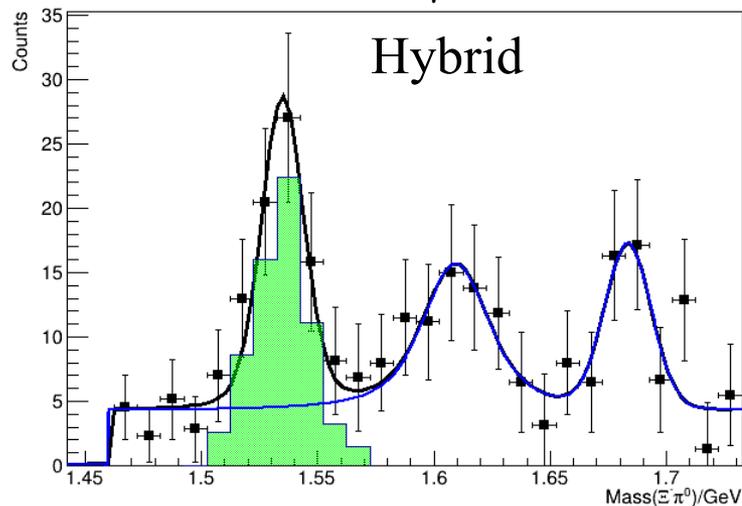


$9 \text{ GeV} < E_\gamma < 11 \text{ GeV}$

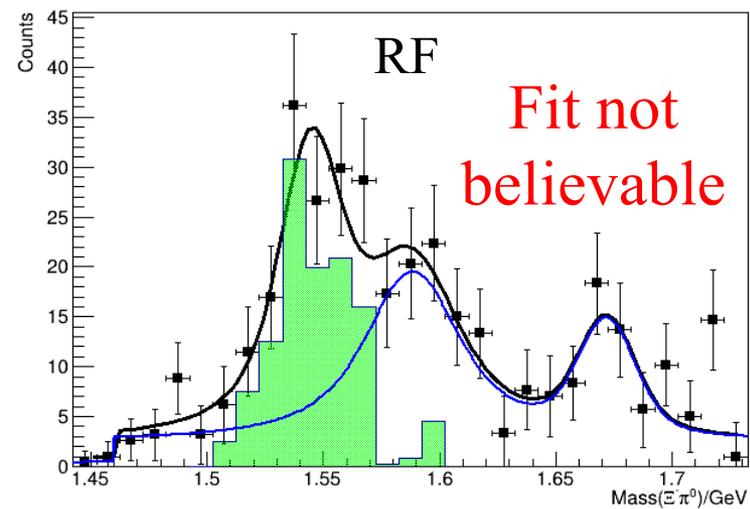
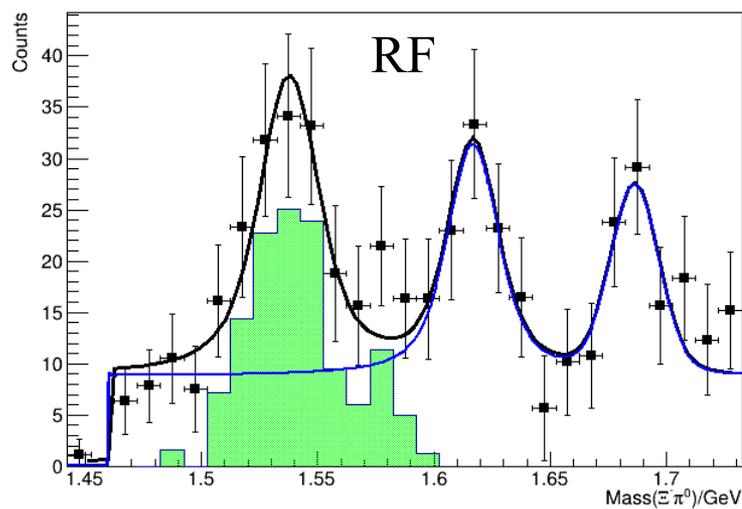
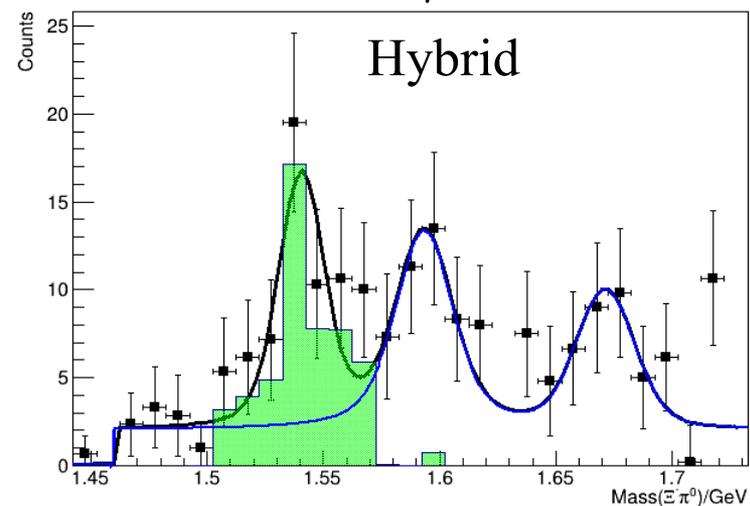


$E\pi$ yield extraction binned in E_γ

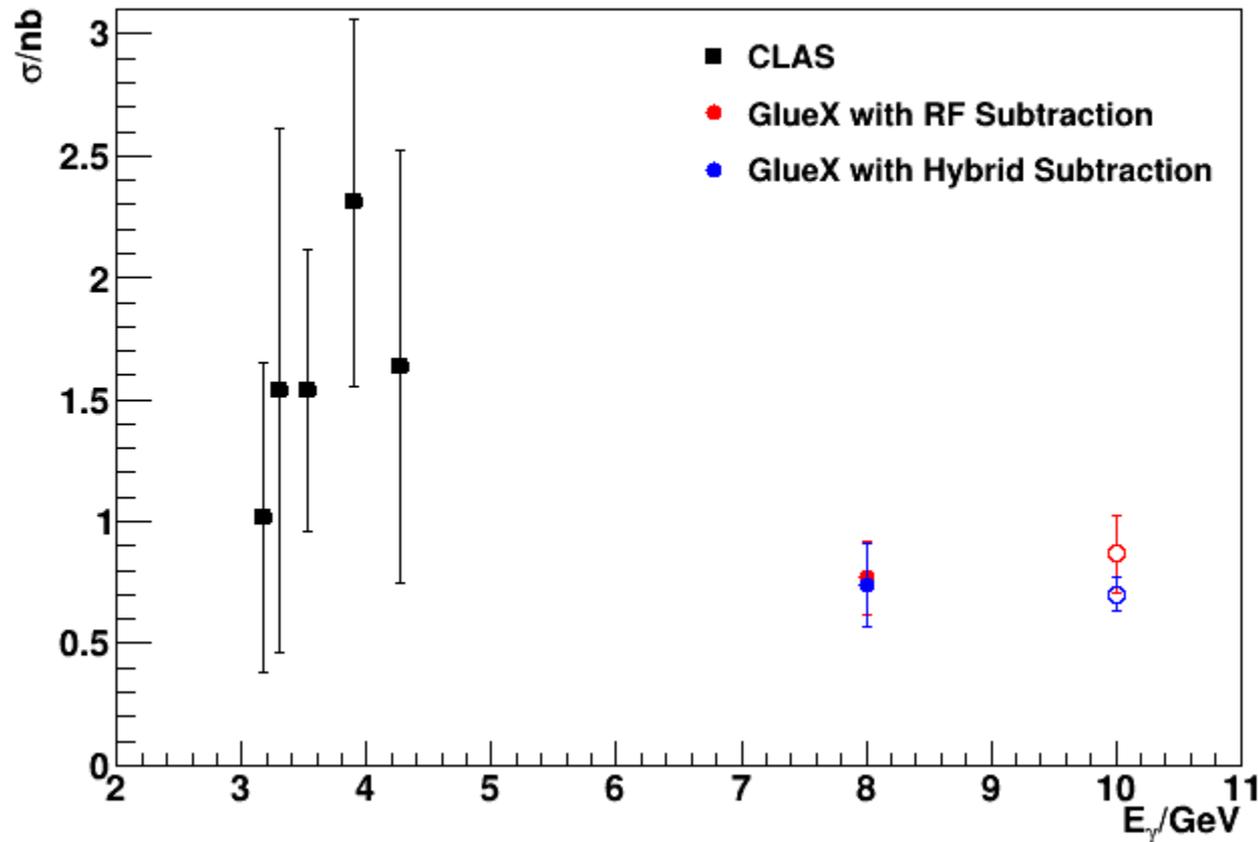
$7 \text{ GeV} < E_\gamma < 9 \text{ GeV}$



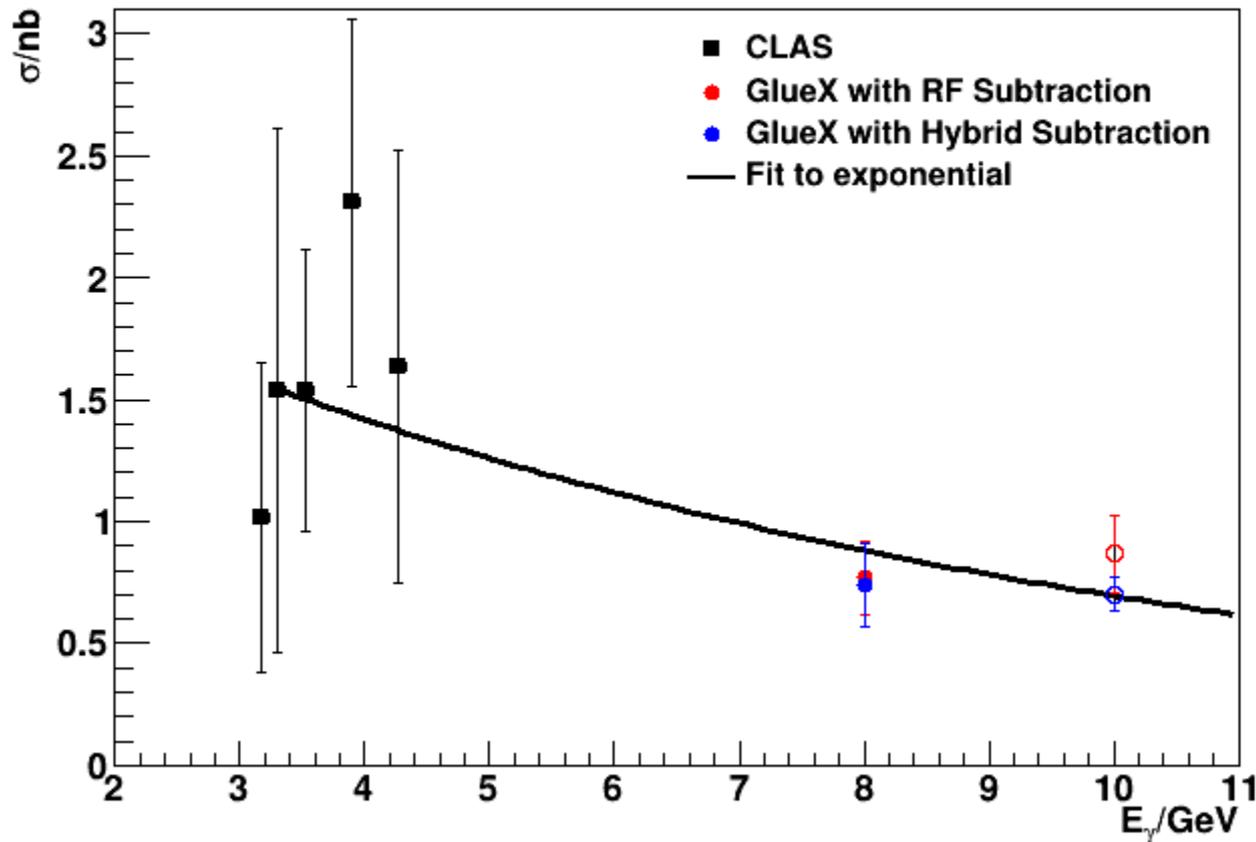
$9 \text{ GeV} < E_\gamma < 11 \text{ GeV}$



$E^-(1530)$ total cross section for binned E_γ



$E^-(1530)$ total cross section for binned E_γ with exponential fit



Title



Title

