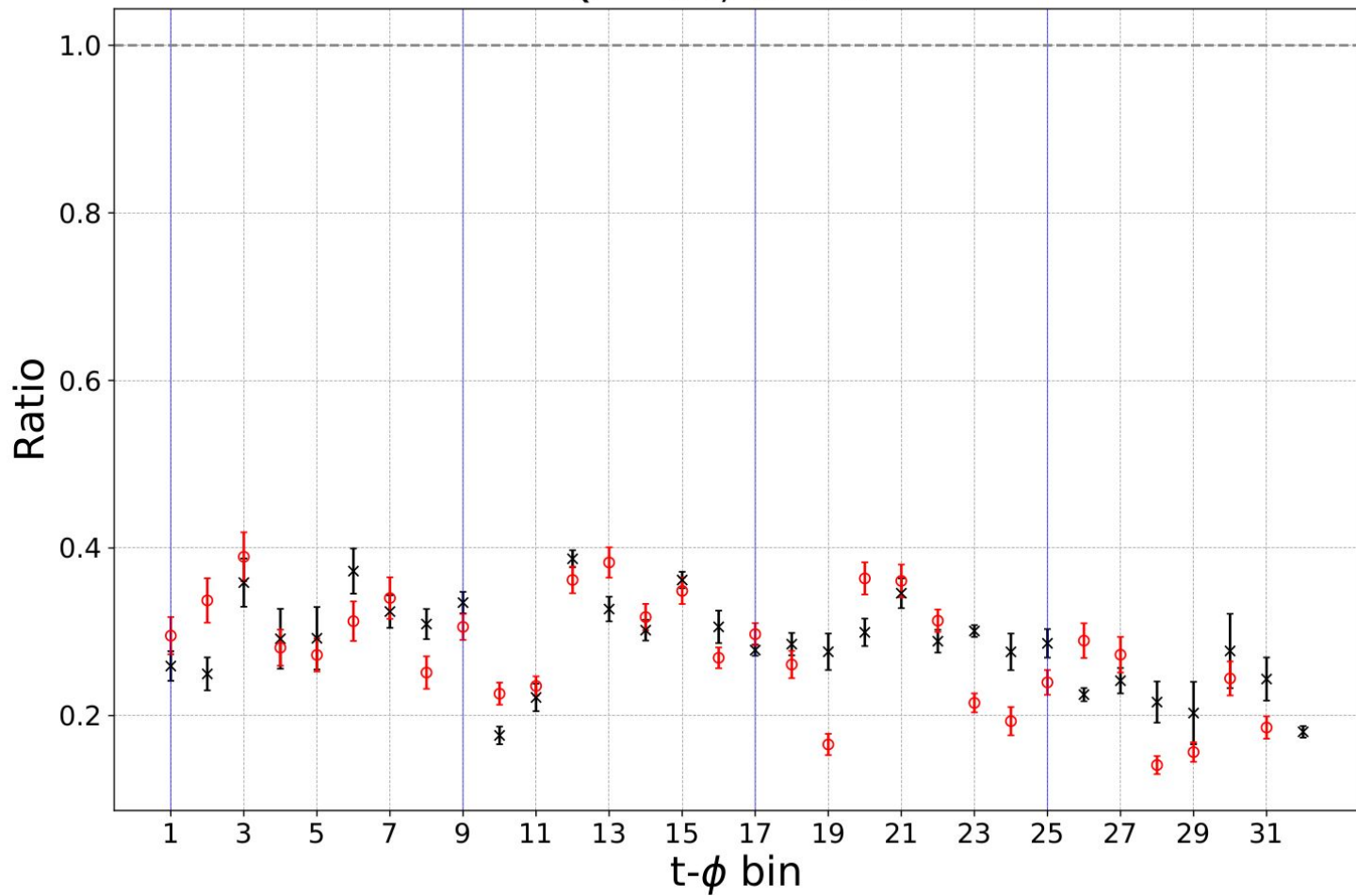


KaonLT Meeting

September 5th, 2024

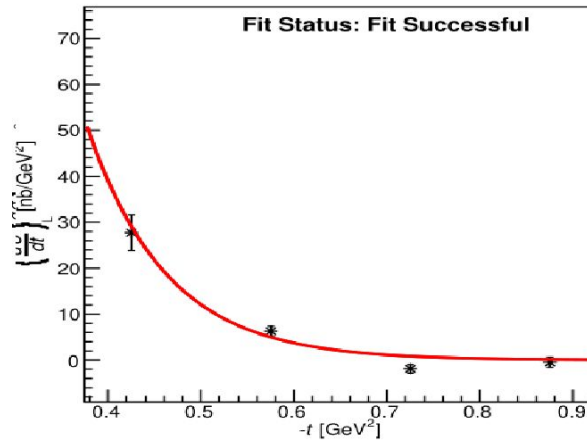
Richard Trotta

$Q^2=4.4, W=2.74$

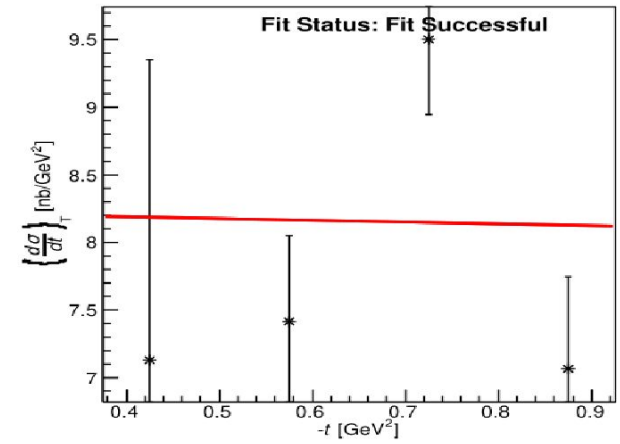


$i=10$

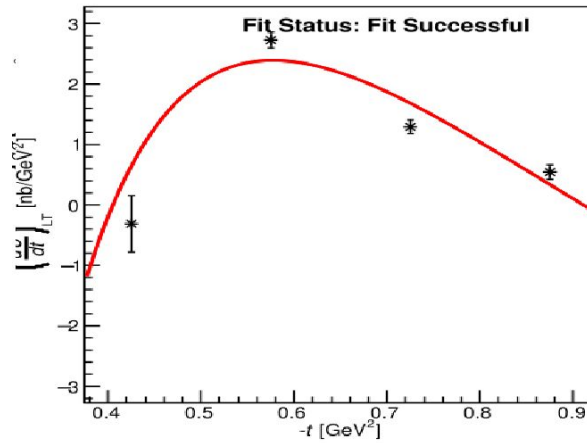
Sigma L Model Fit



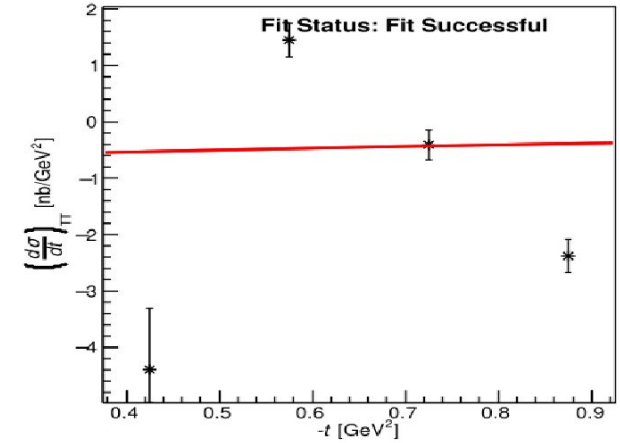
Sigma T Model Fit



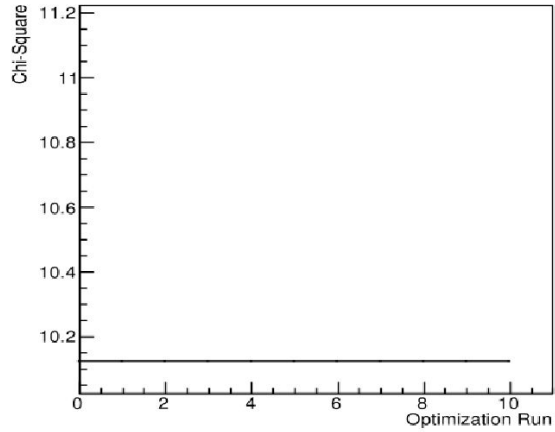
Sigma LT Model Fit



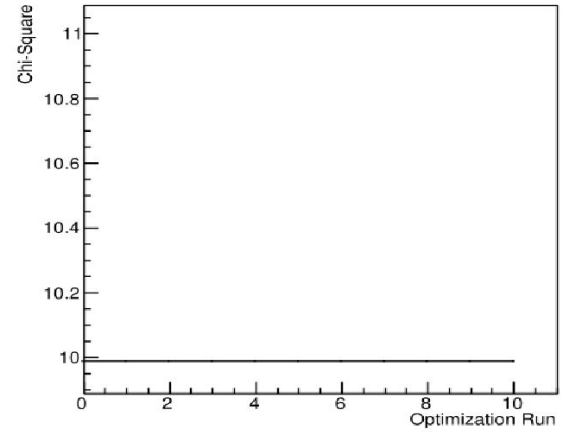
Sigma TT Model Fit



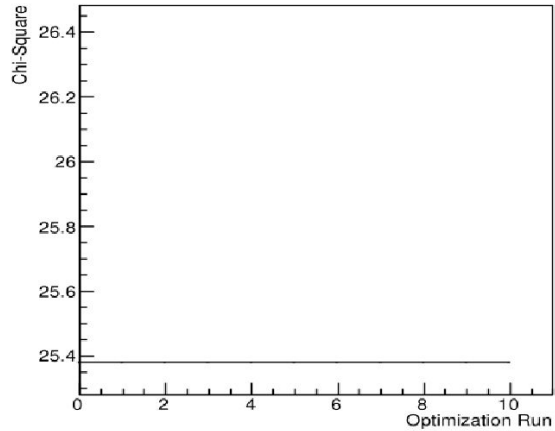
Sig L Chi-Square Convergence



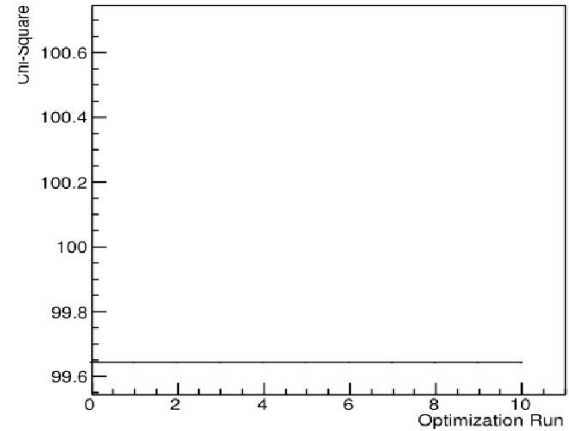
Sig T Chi-Square Convergence



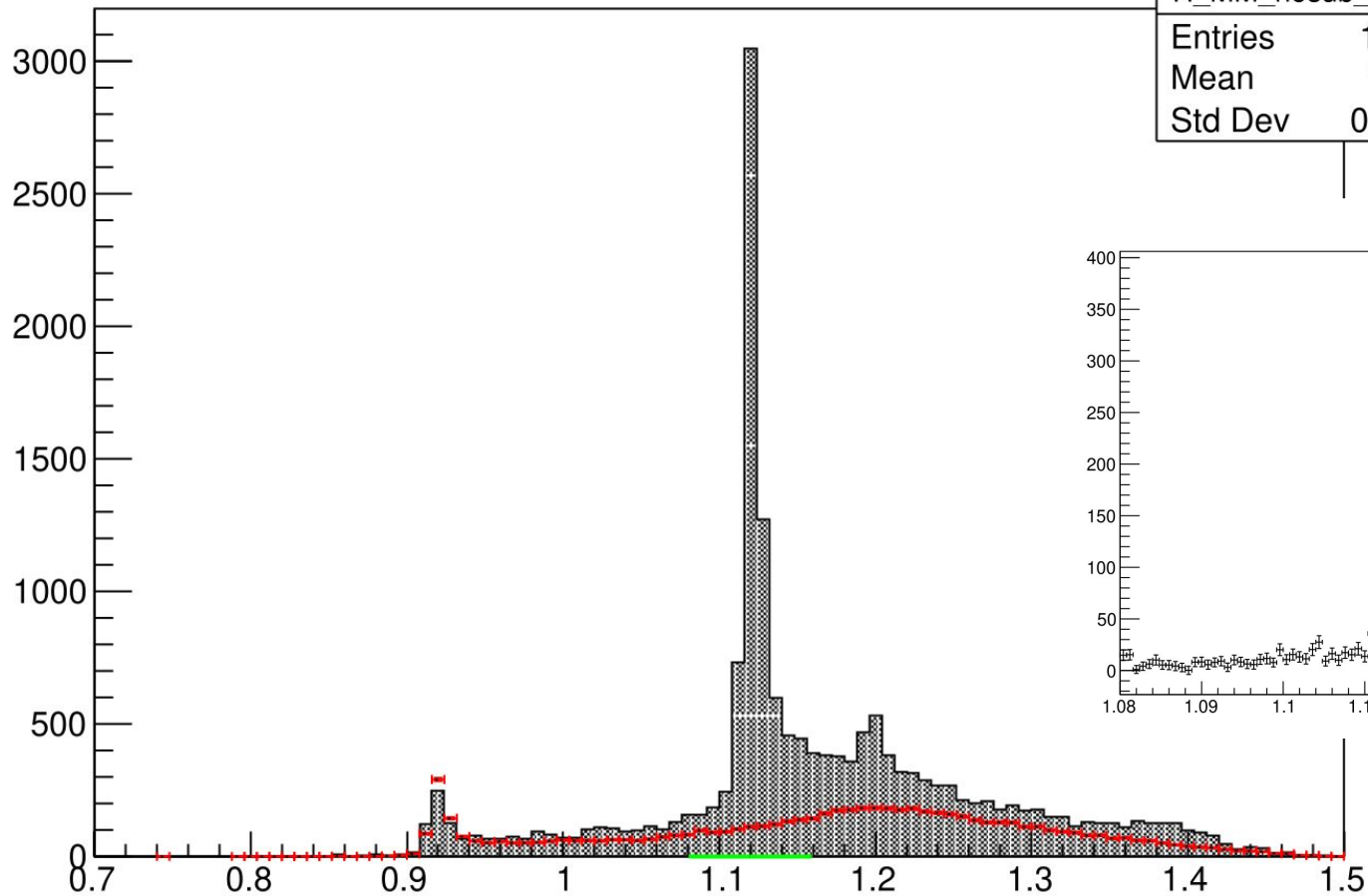
Sig LT Chi-Square Convergence



Sig TT Chi-Square Convergence



MM_nosub_k



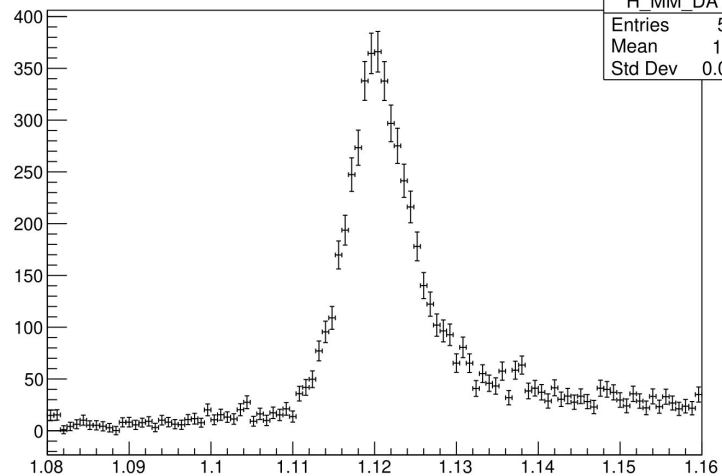
H_MM_nosub_DATA

Entries 15605

Mean 1.165

Std Dev 0.1068

MM_k



H_MM_DATA

Entries 5057

Mean 1.124

Std Dev 0.0127

Ideas for Debugging

- Check histogram binning for yield calculations
- Check instances of $2.0/\pi$

- Checked already and doesn't seem to be the cause
- Double (triple) check

```
sig=sigT+eps_mod*sigL+eps_mod*cos(2.*phi)*sigTT
> +sqrt(2.0*eps_mod*(1.+eps_mod))*cos(phi)*sigLT

sig=sig/2./pi/1.d+06      !dsig/dtdphicm in microbarns/MeV**2/rad
sig=sig/2./pi           !dsig/dtdphicm in microbarns/GeV**2/rad

x_mod=sig
```

- Run for very small -t range (~ 0.1)
 - $Q^2=3.0$, $W=3.14$, very good statistics in $t=0.2-0.3$ range
- Triple (quadruple, quintuple) check SIMC vs iterated weight results
- Run code with Vijay's pion settings
- Systematic issue for all data?? 😞