

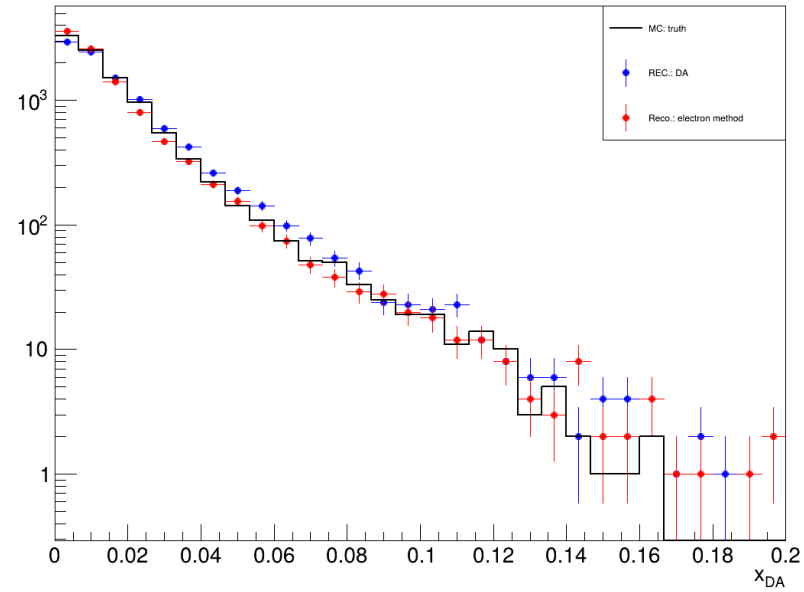
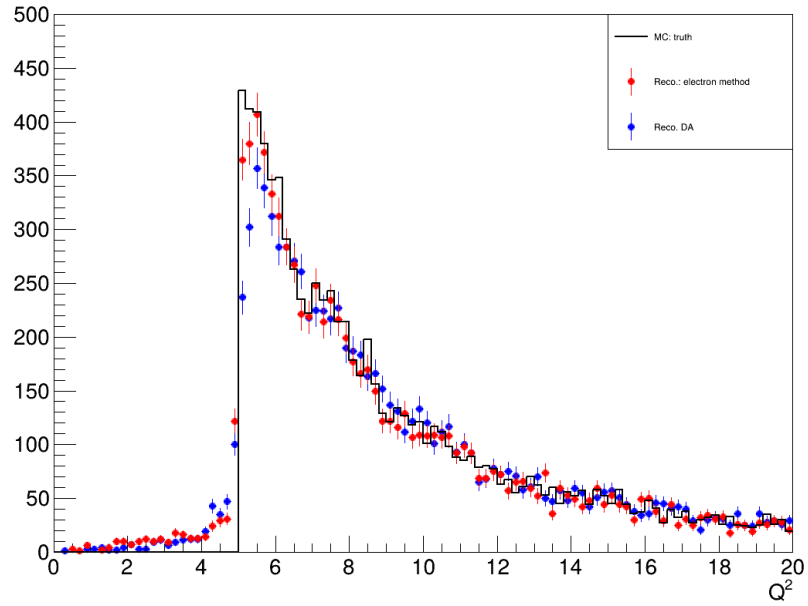
UPDATE ON CODE ANALYSIS

HADI HASHAMIPOUR

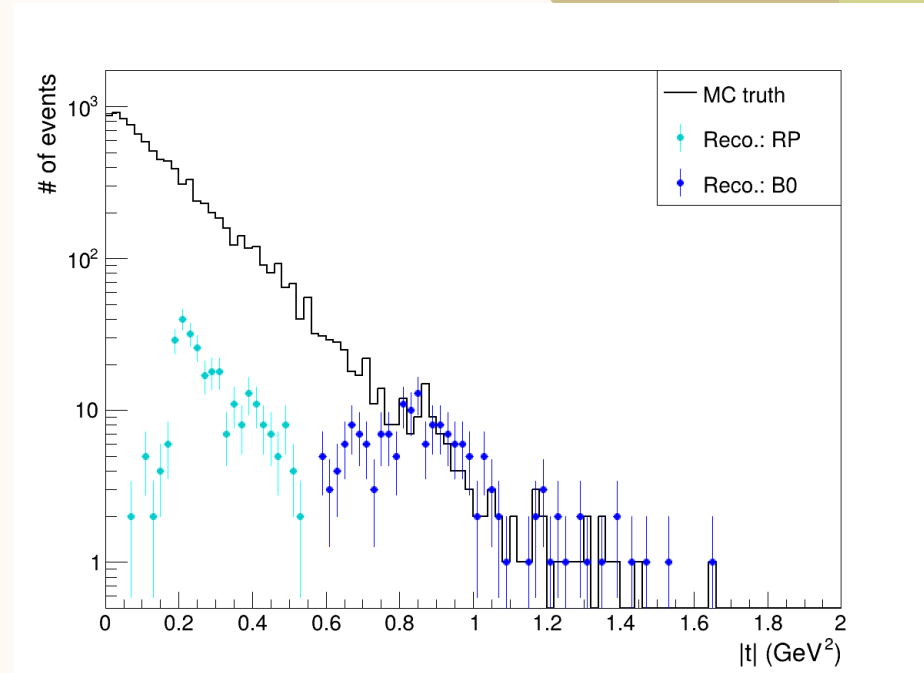
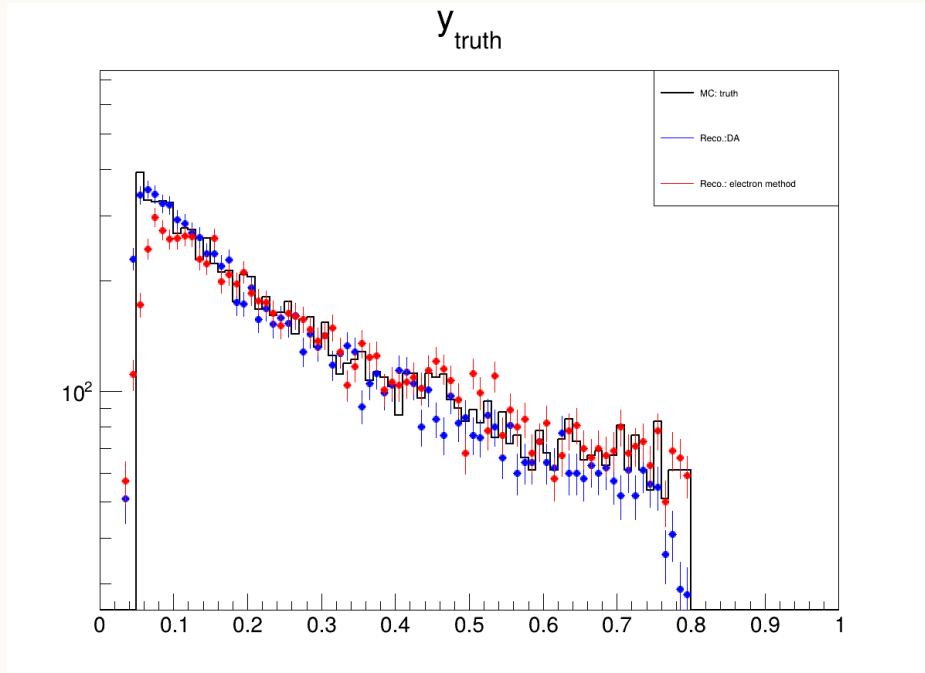
MINOR REVISION OF PREVIOUS PLOTS

These plots seemed alright, but there was some minor changes.

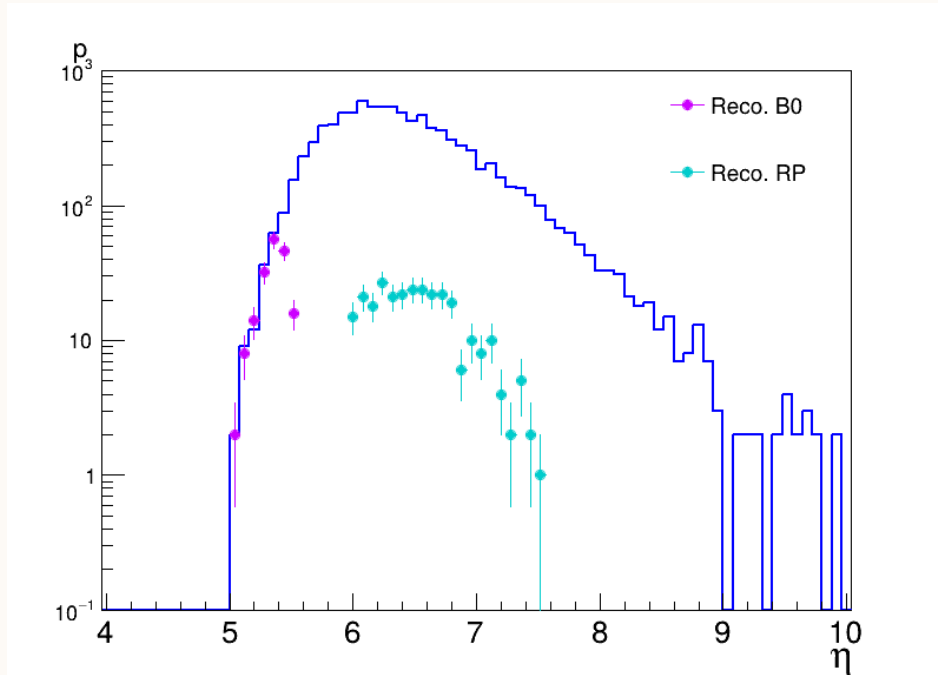
PLOTS FROM BEFORE



PLOTS FROM BEFORE



PLOTS FROM BEFORE

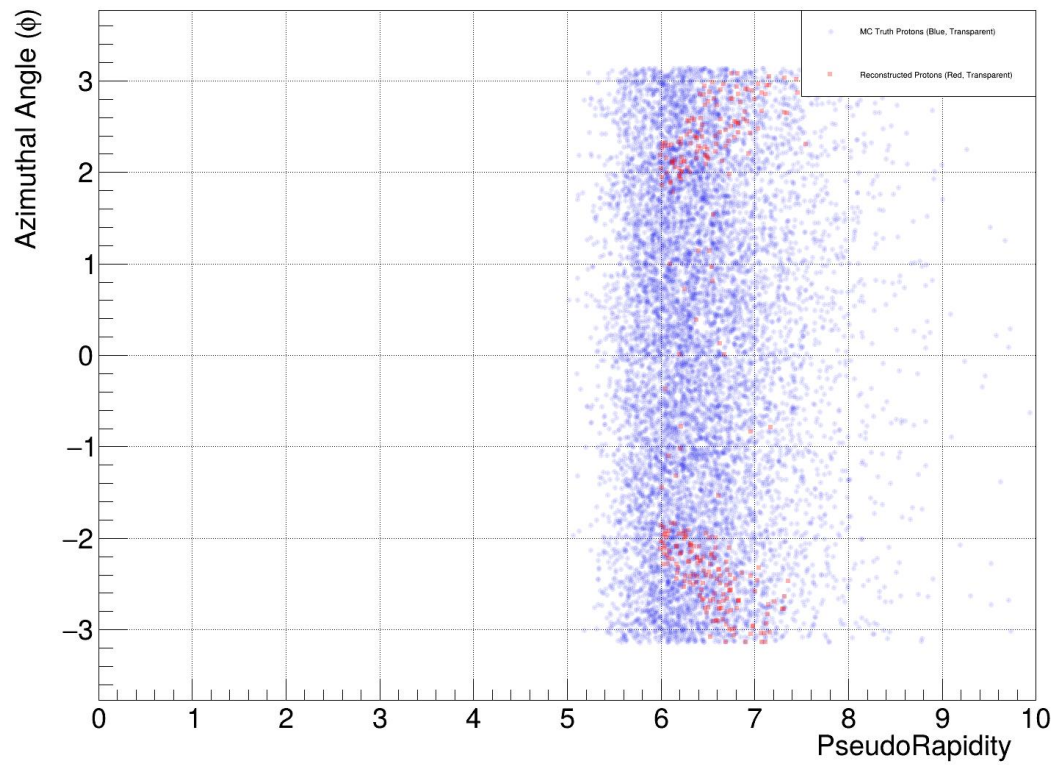


RECAP

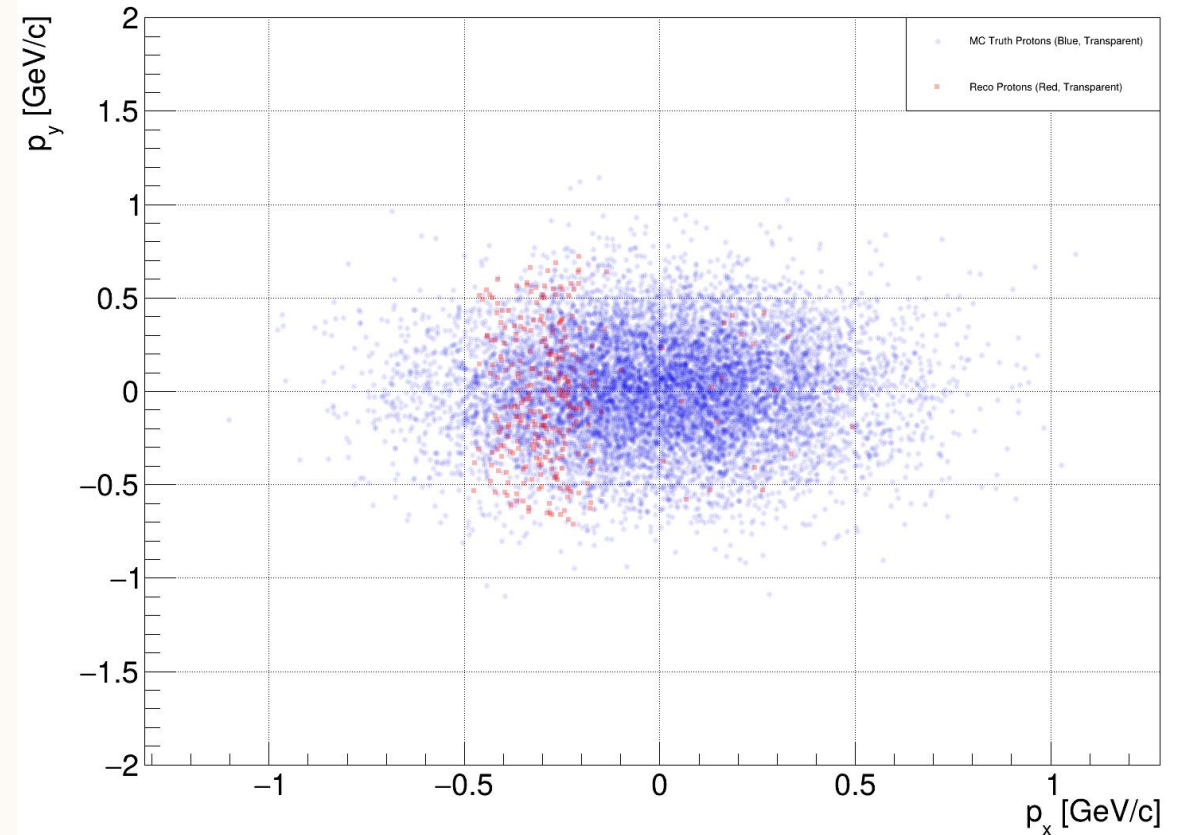
There was an inconsistency between the proton hit distribution in RPs plotted in p_x - p_y plane and in η - ϕ plane.

PLOTS FROM LAST WEEK

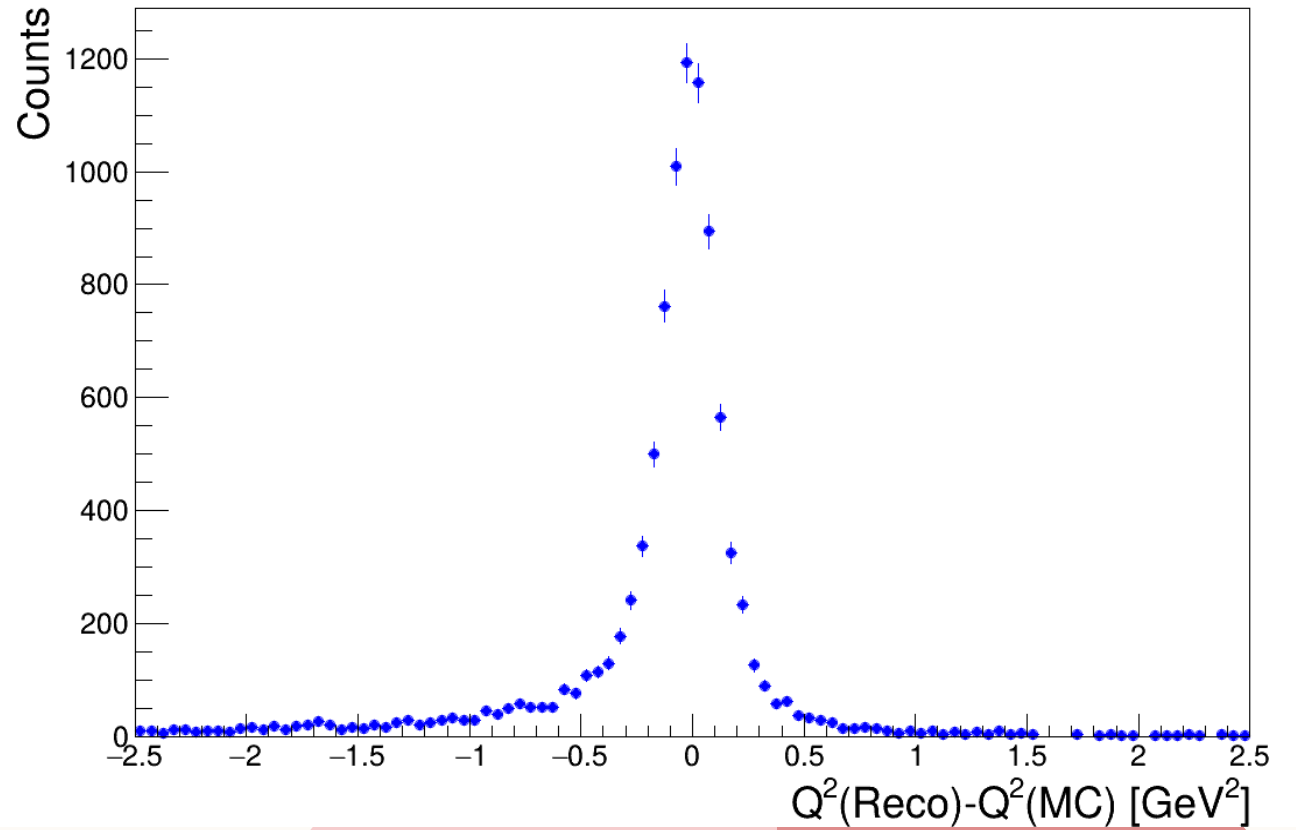
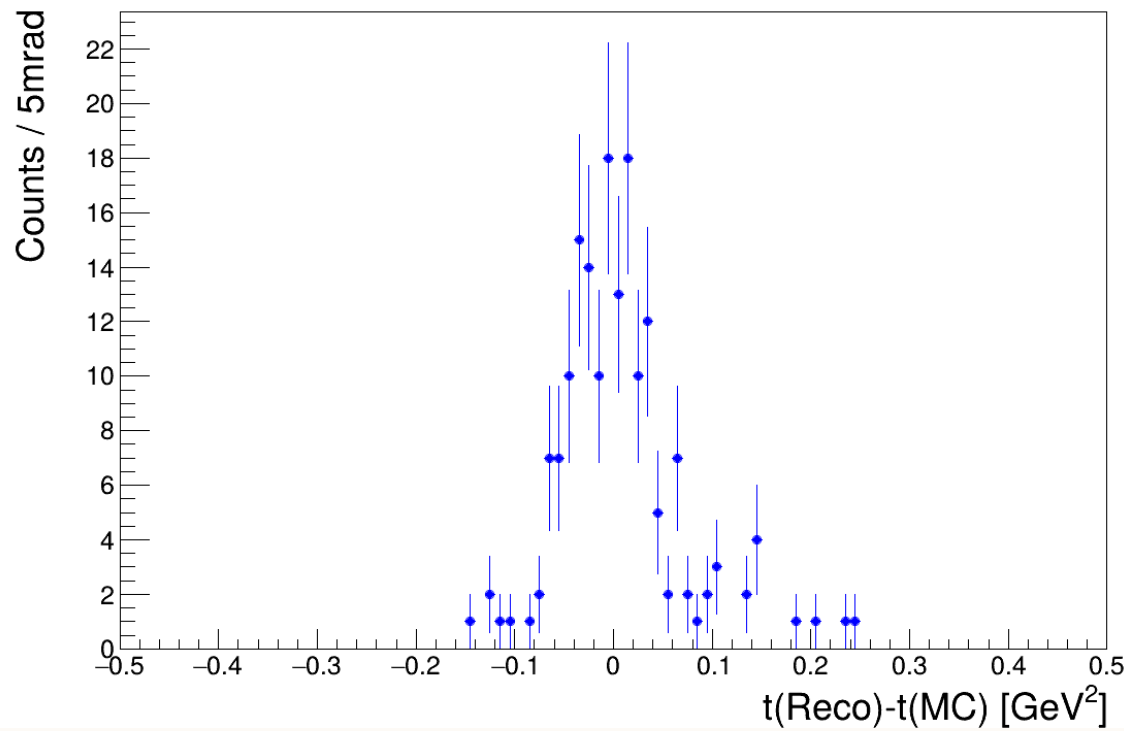
Proton MC vs Reco Hits (η - ϕ)



Proton MC vs Reco Hits Scatter Plot

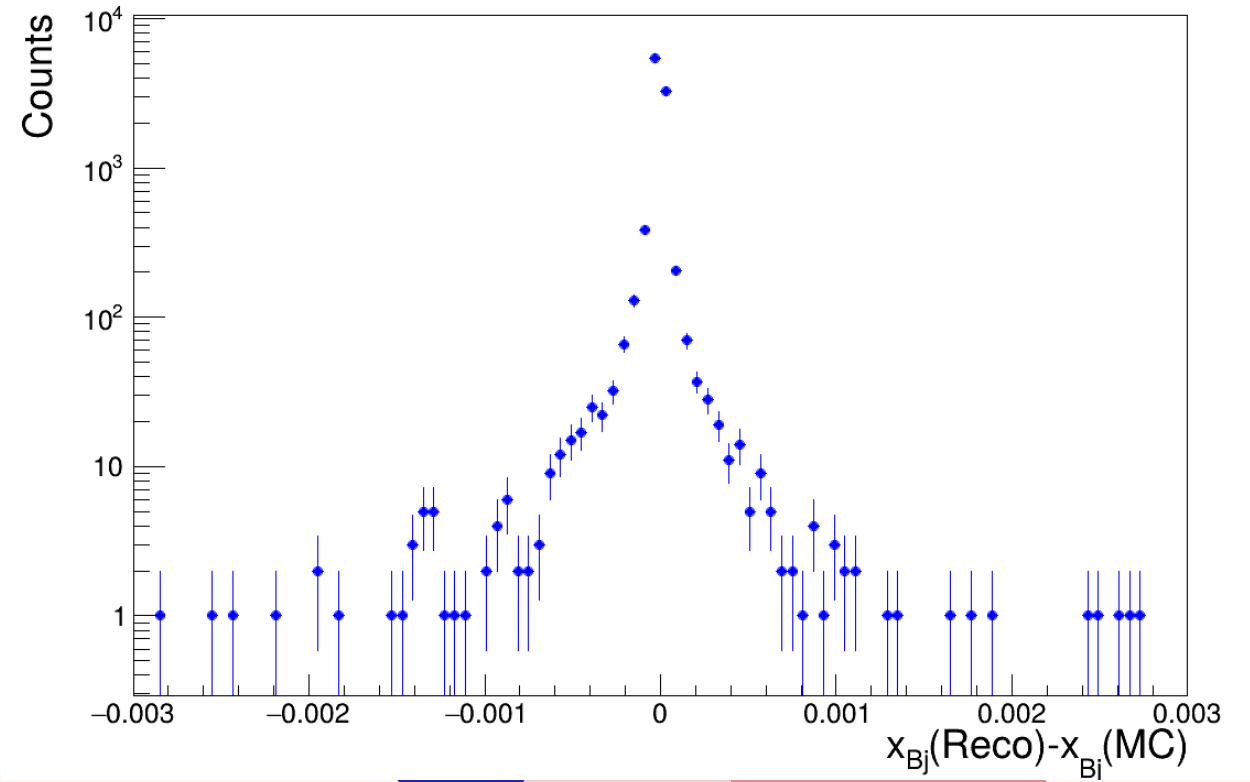
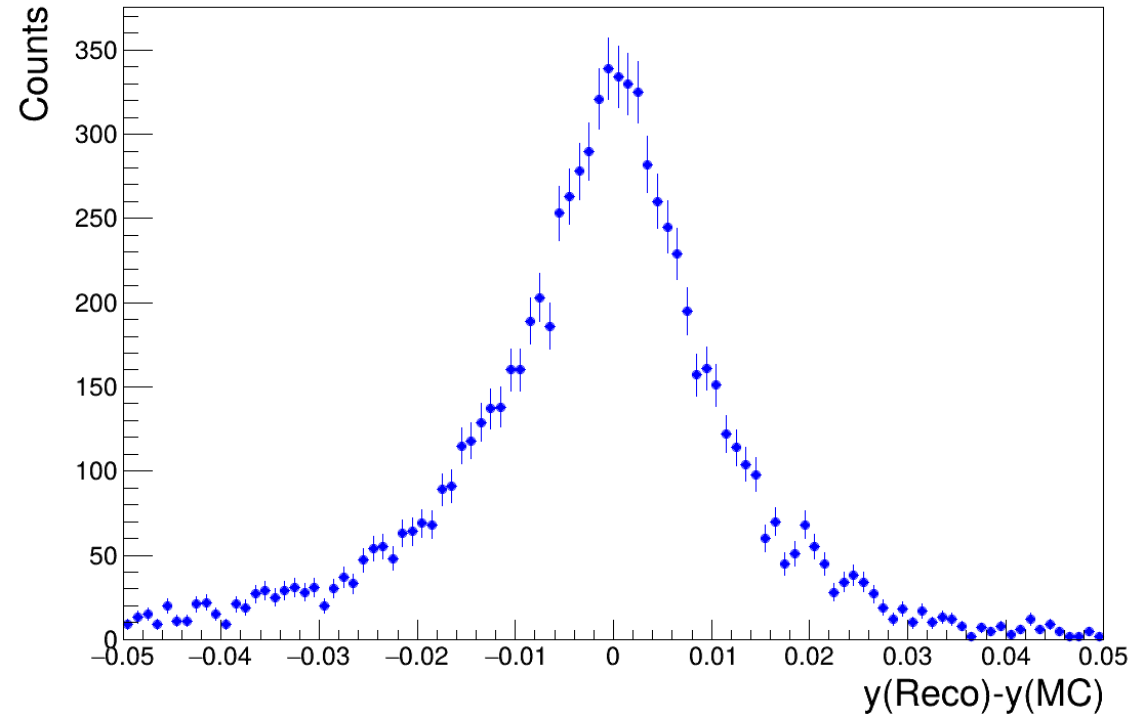


ABSOLUTE RESOLUTION

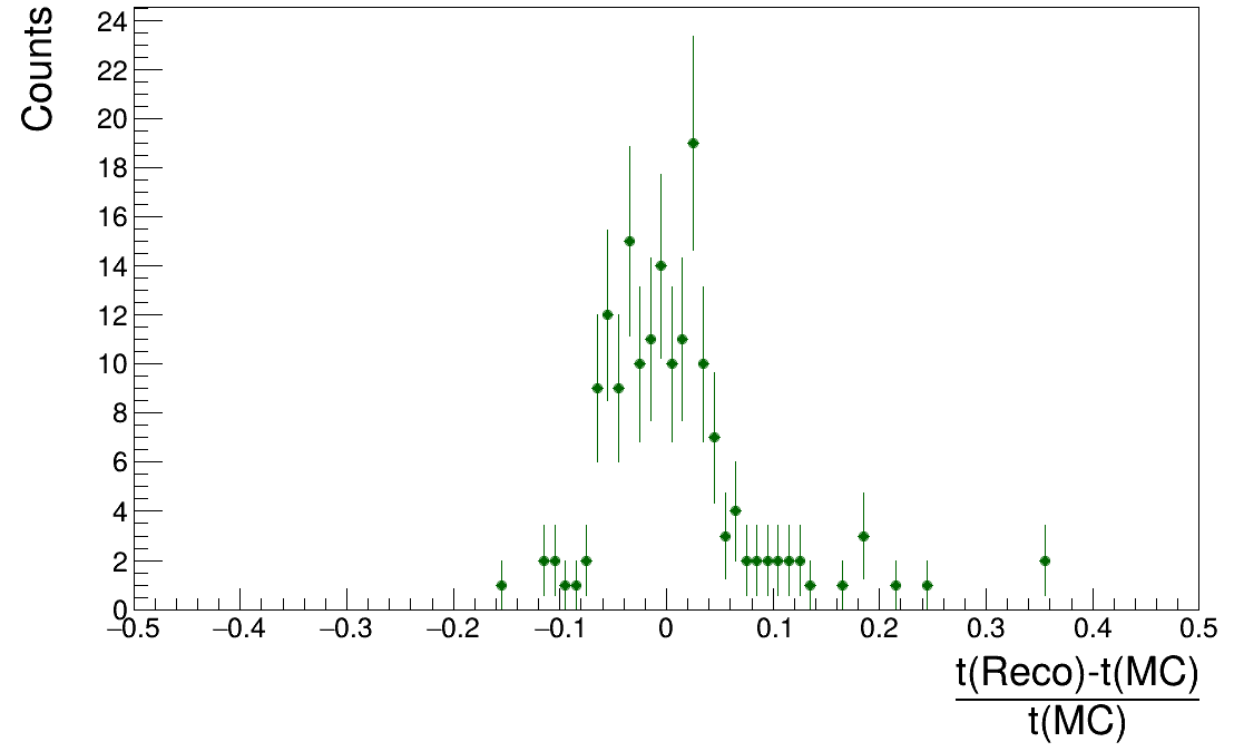
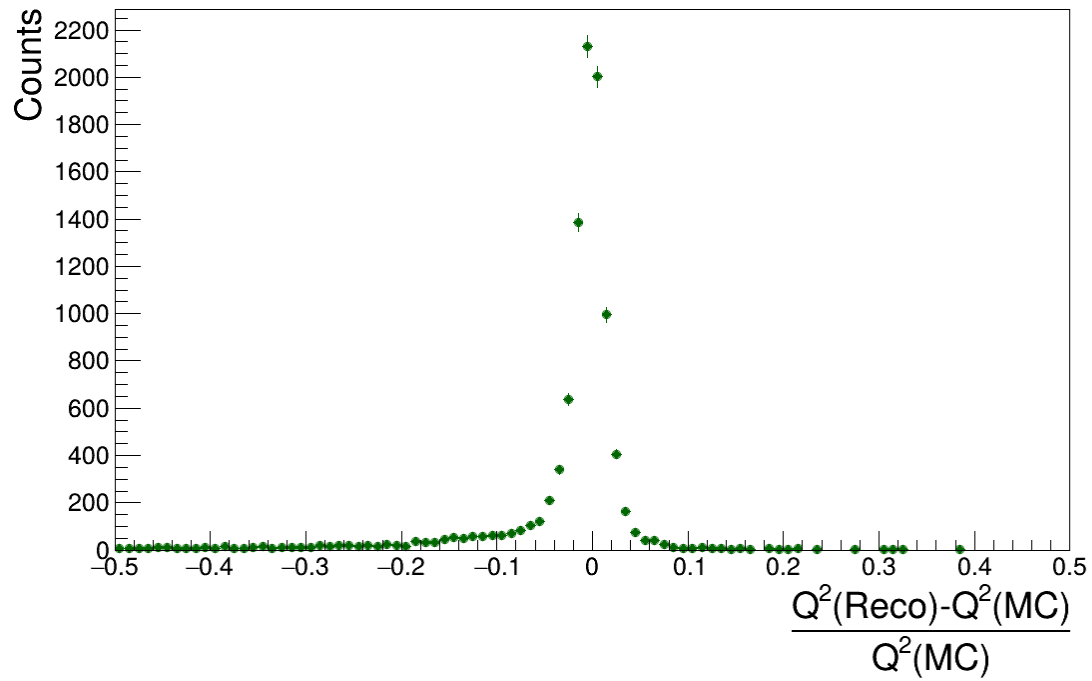


ABSOLUTE RESOLUTION

Inelasticity

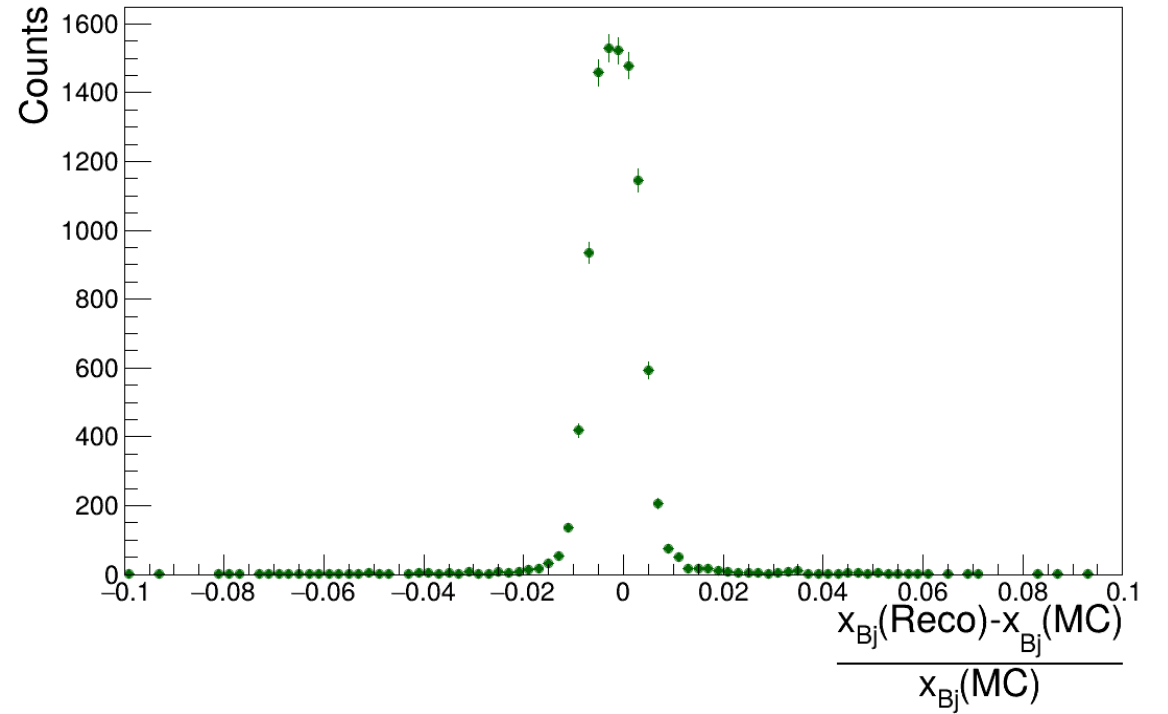
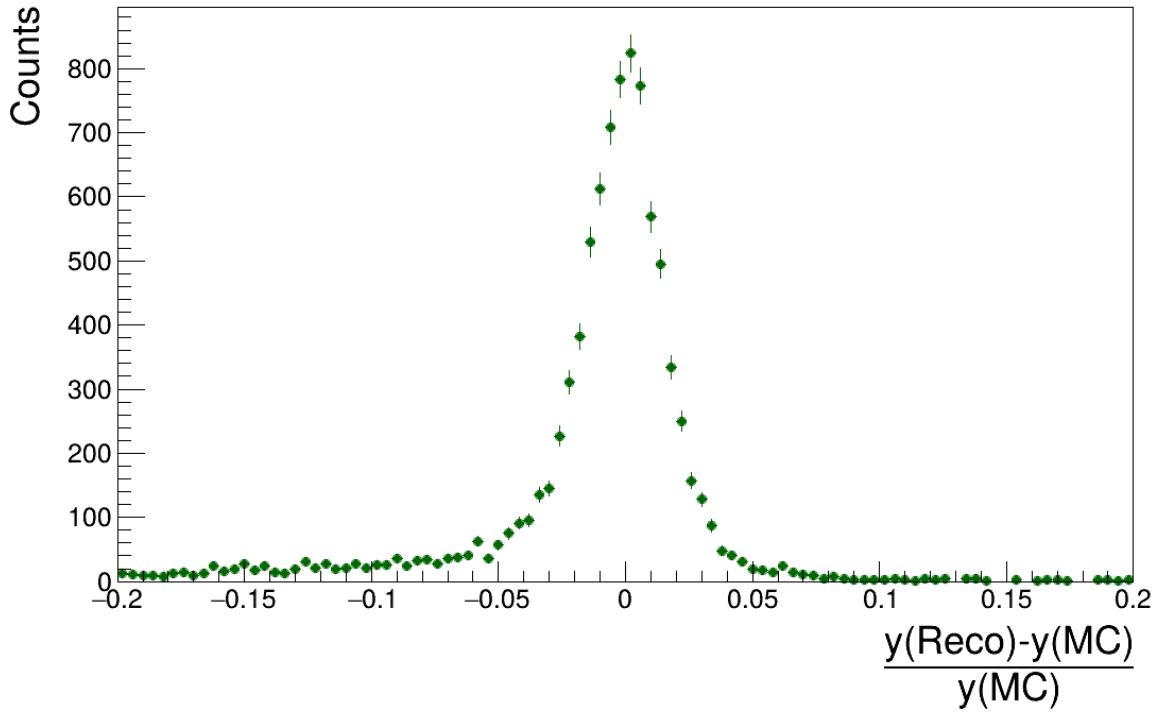


RELATIVE RESOLUTION

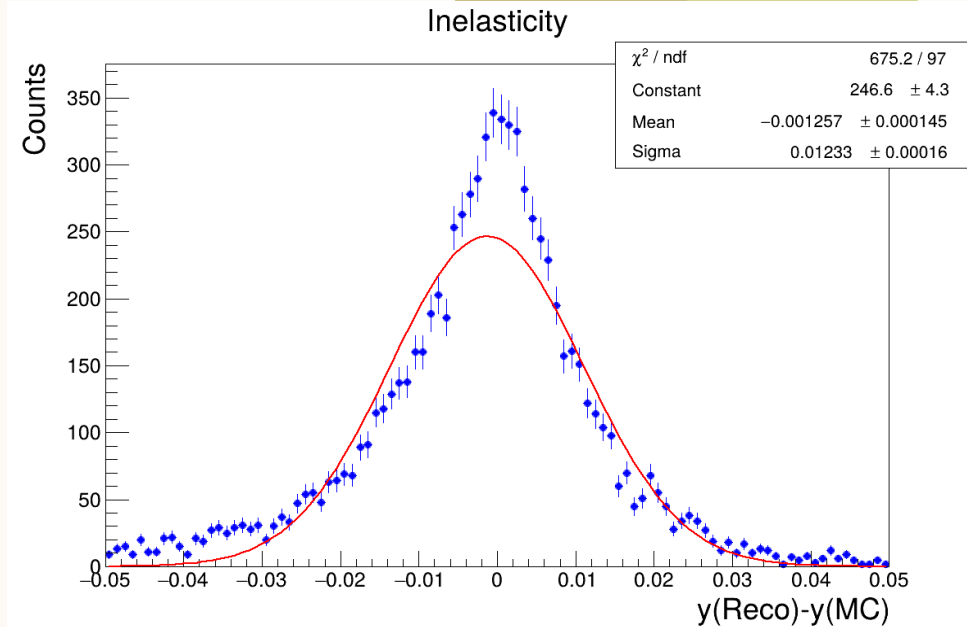
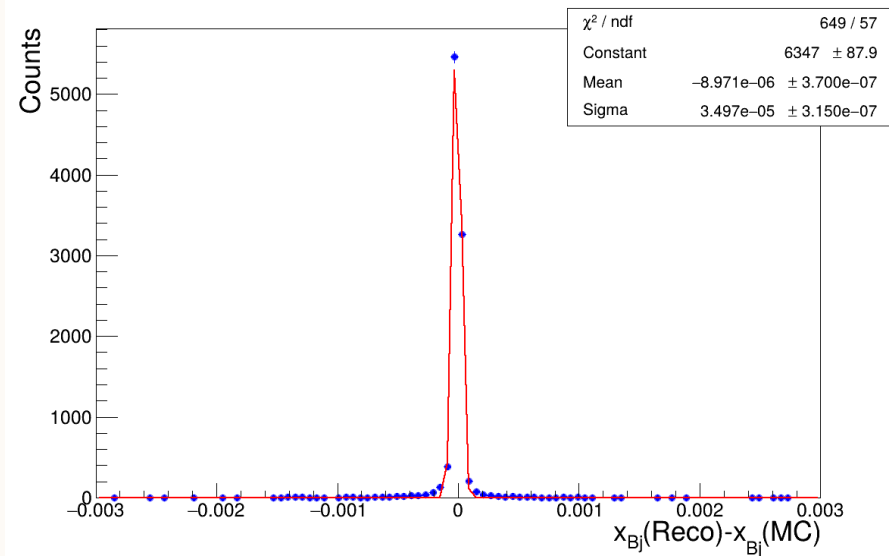


RELATIVE RESOLUTION

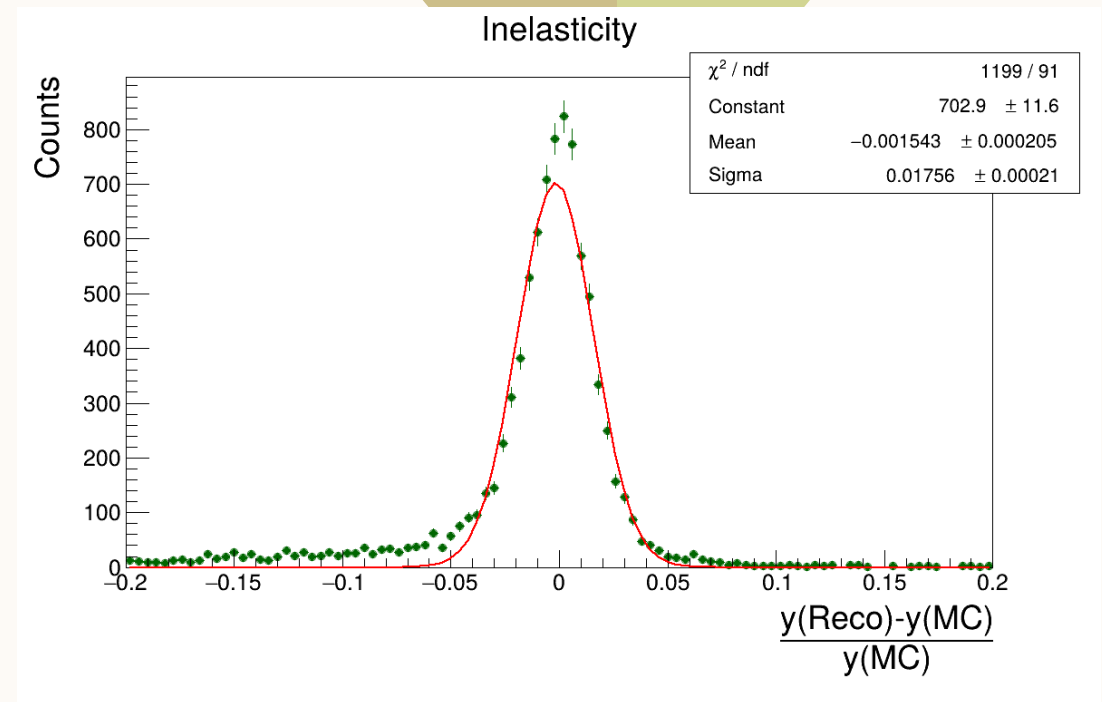
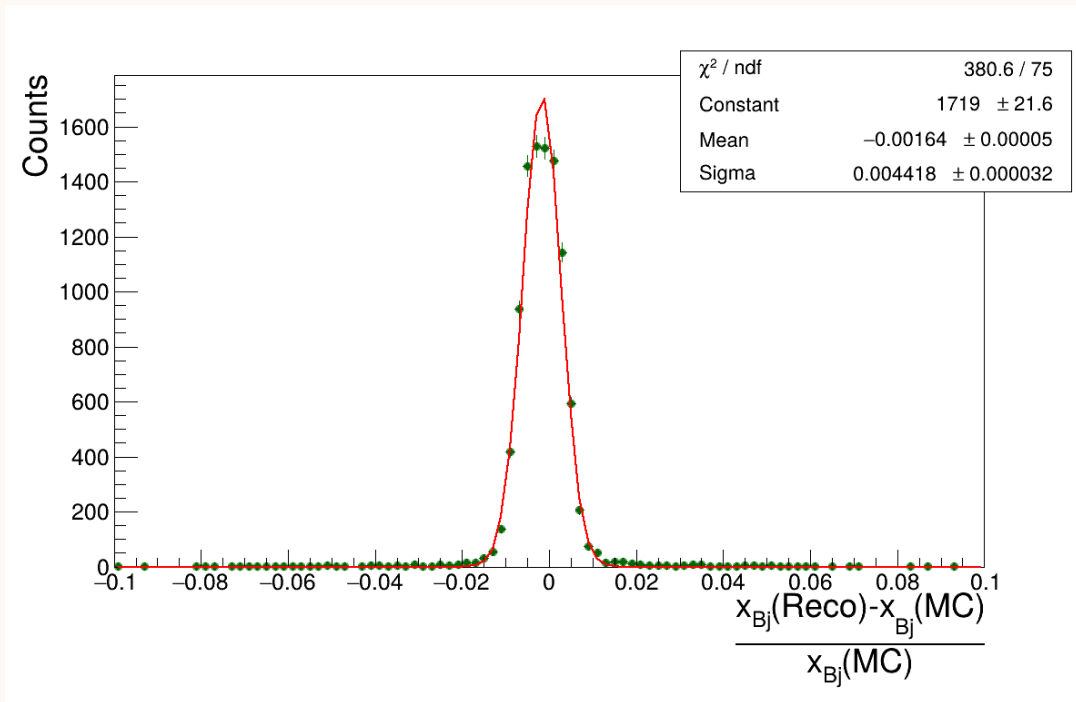
Inelasticity



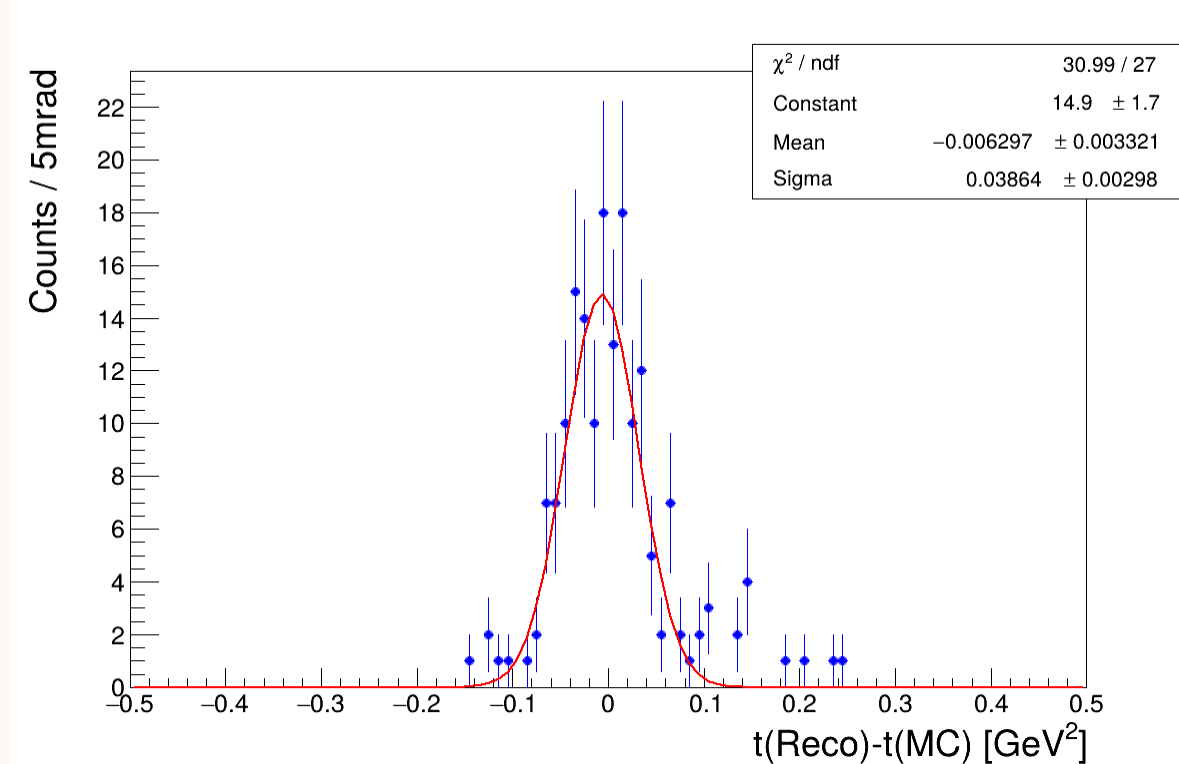
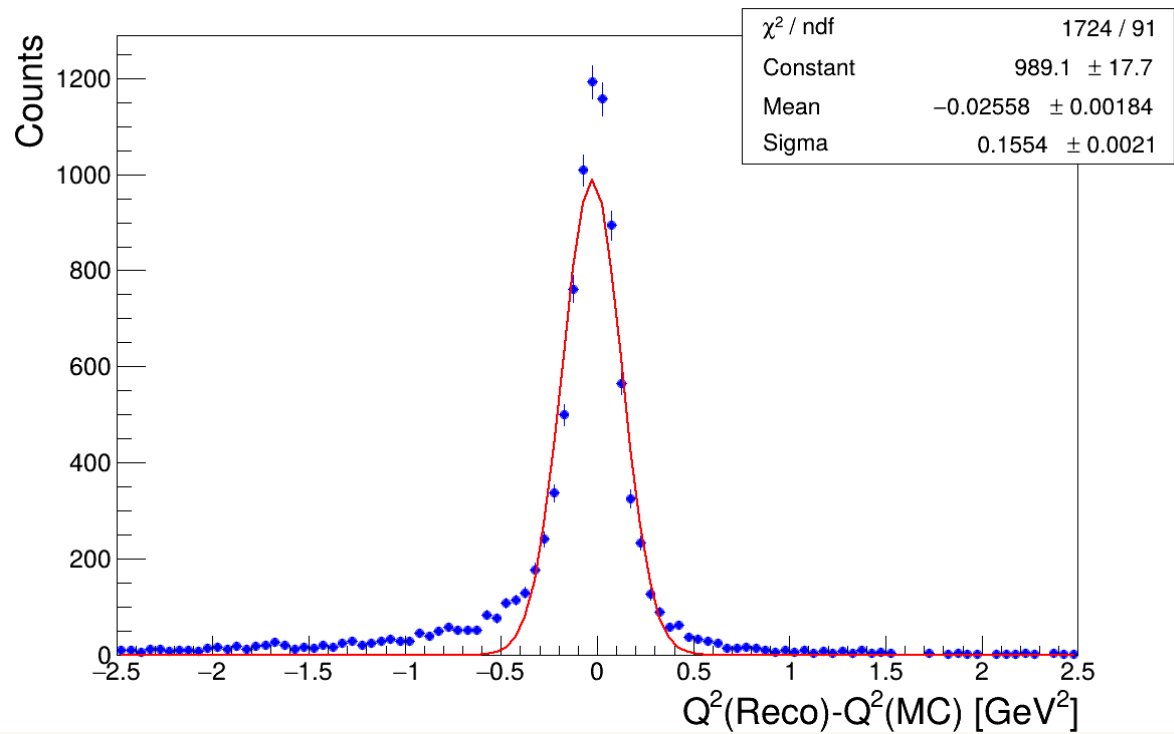
NEW PLOTS: RESOLUTION PLOT WITH FITTED GAUSSIAN



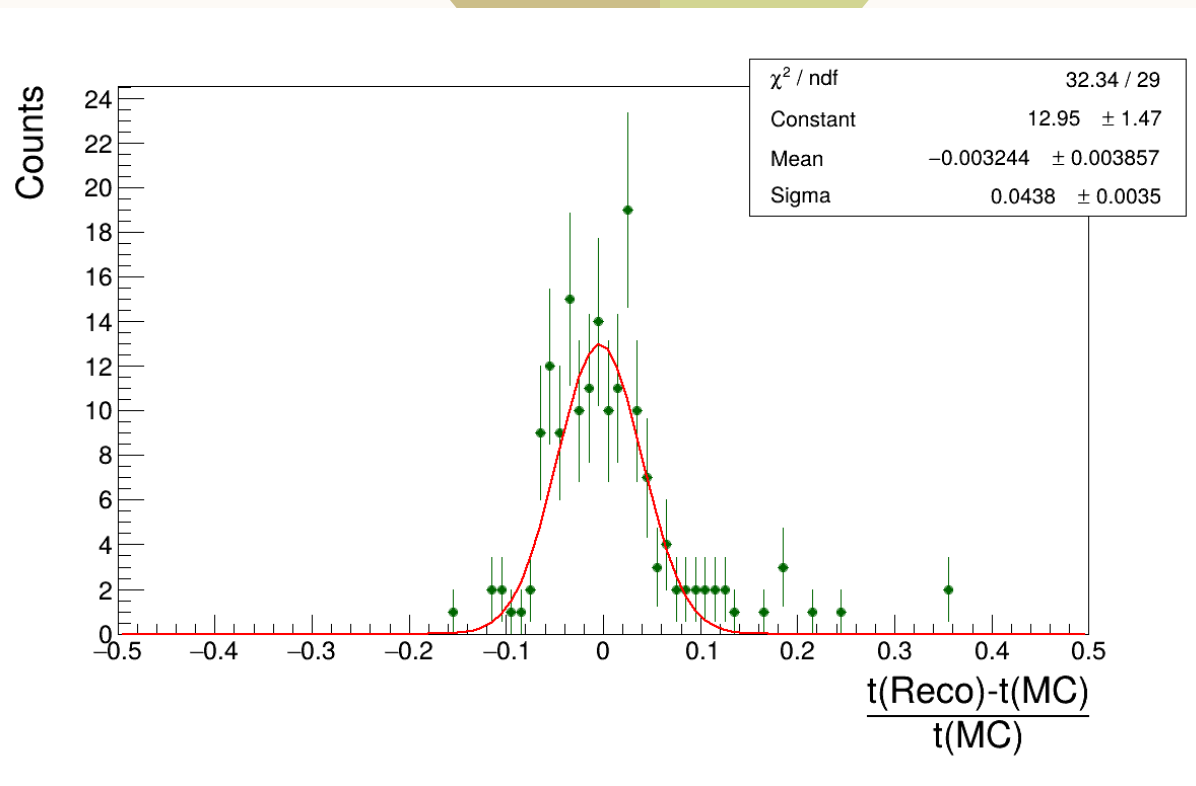
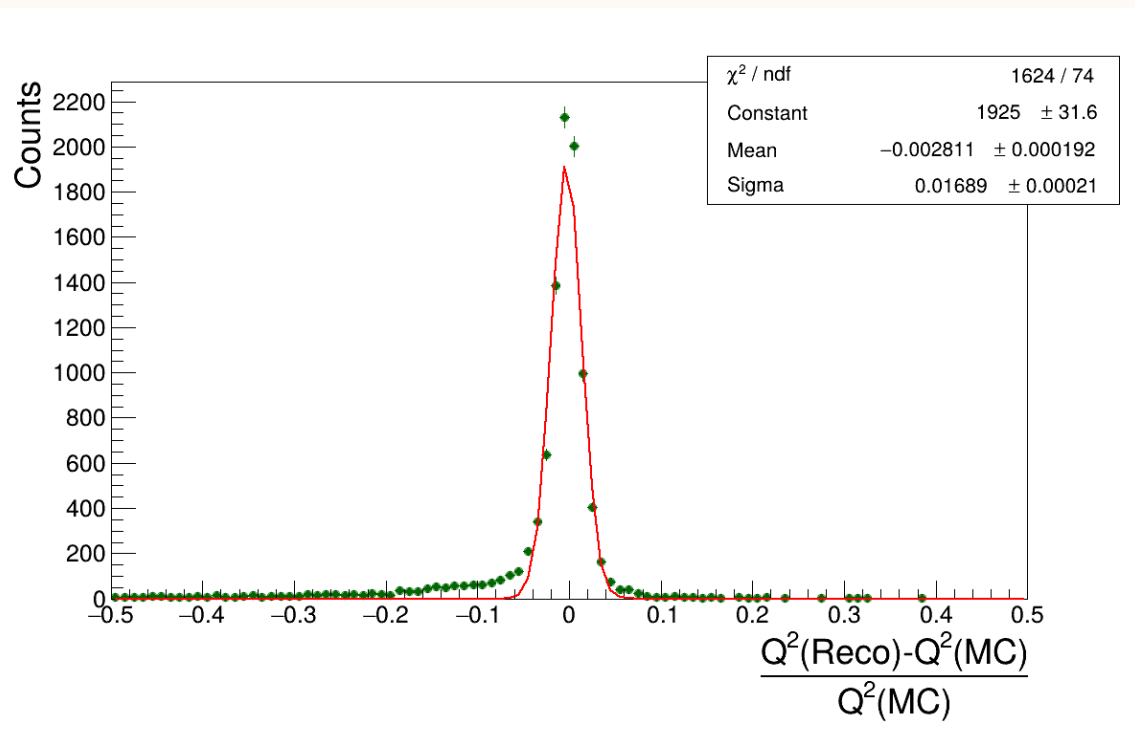
NEW PLOTS: RESOLUTION PLOT WITH FITTED GAUSSIAN



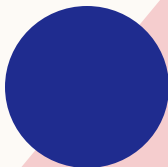
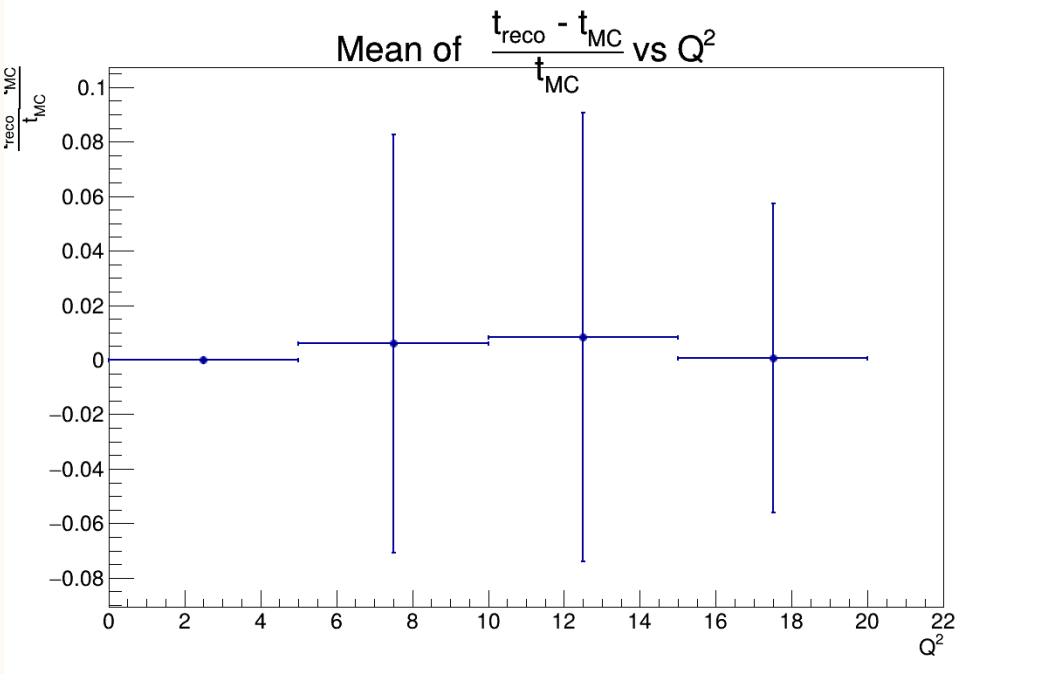
NEW PLOTS: RESOLUTION PLOT WITH FITTED GAUSSIAN



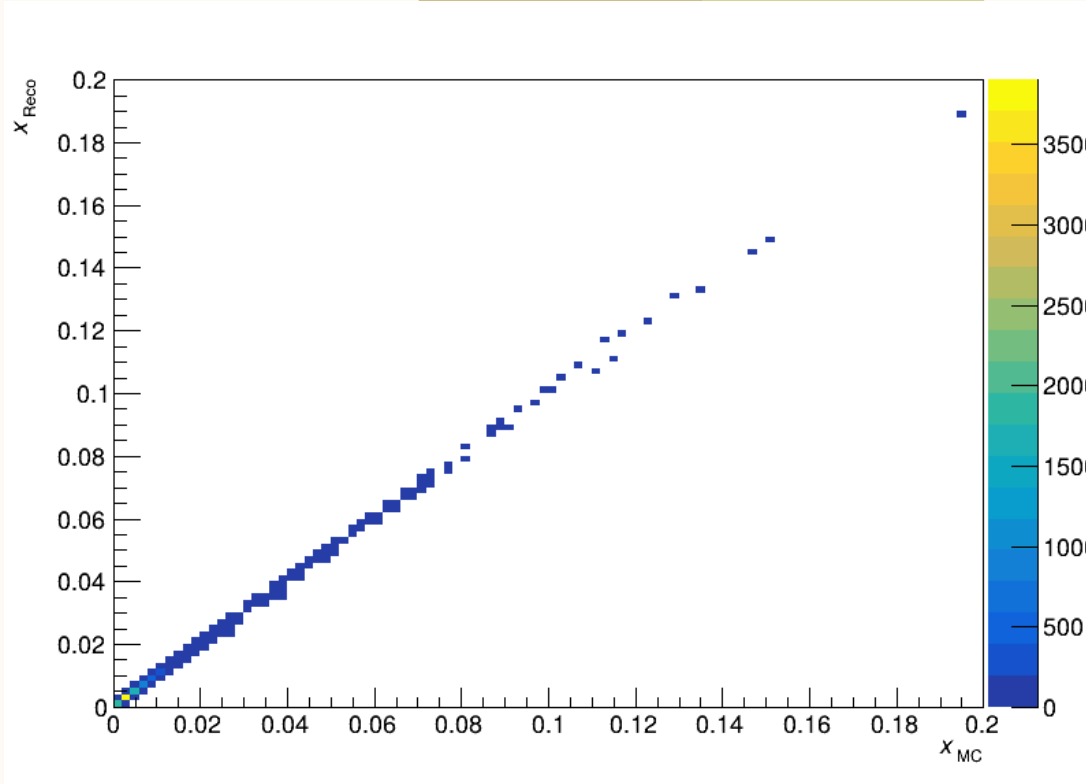
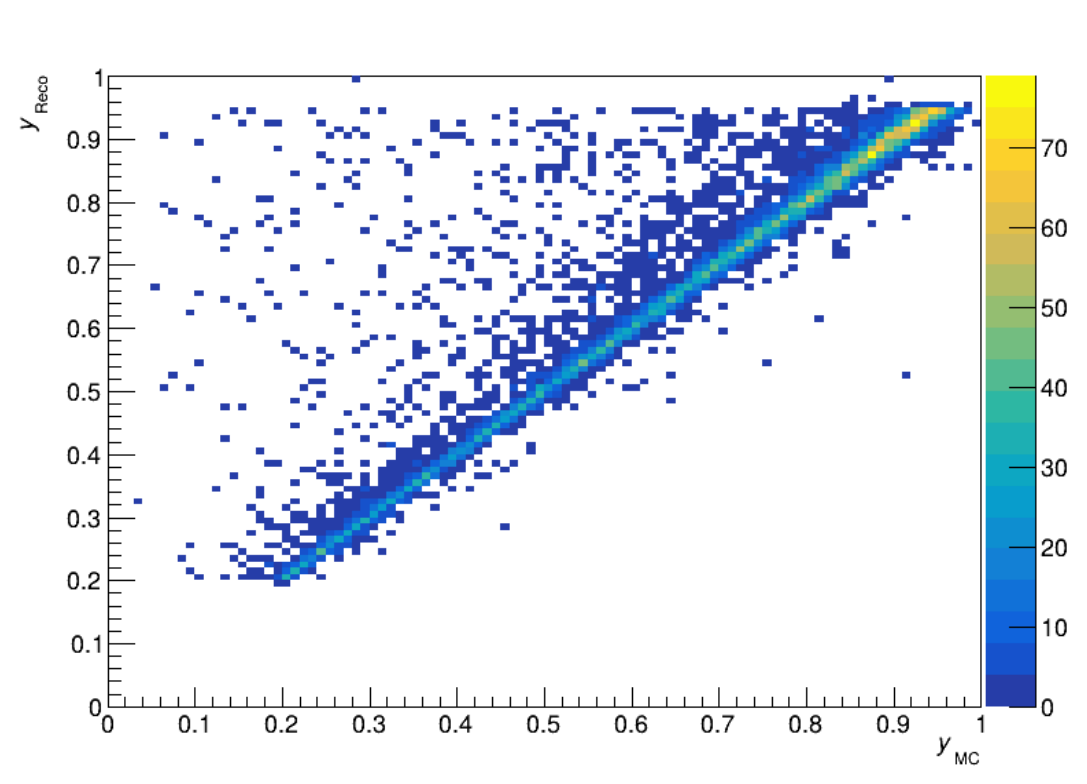
NEW PLOTS: RESOLUTION PLOT WITH FITTED GAUSSIAN



NEW PLOTS: RELATIVE BIN BY BIN RESOLUTION



NEW PLOTS: RECO. MC CORRELATION



FINAL TIPS & TAKEAWAYS

- Old ones seem OK.
- After meeting I contacted Alex Jentsch, and the problem of inconsistency is solved. The problem was that I should have used another version of detector settings file.
- It was decided that event size of 10K used for these plots is not enough. Because of this point and the last point, I have generated 100K events, the detector simulation and reconstruction is ongoing on ReCaS.
- Binned relative(?) resolution plots was suggested to be added to these plots.

**THANK
YOU**

