

# (Ongoing) DIS momentum resolution

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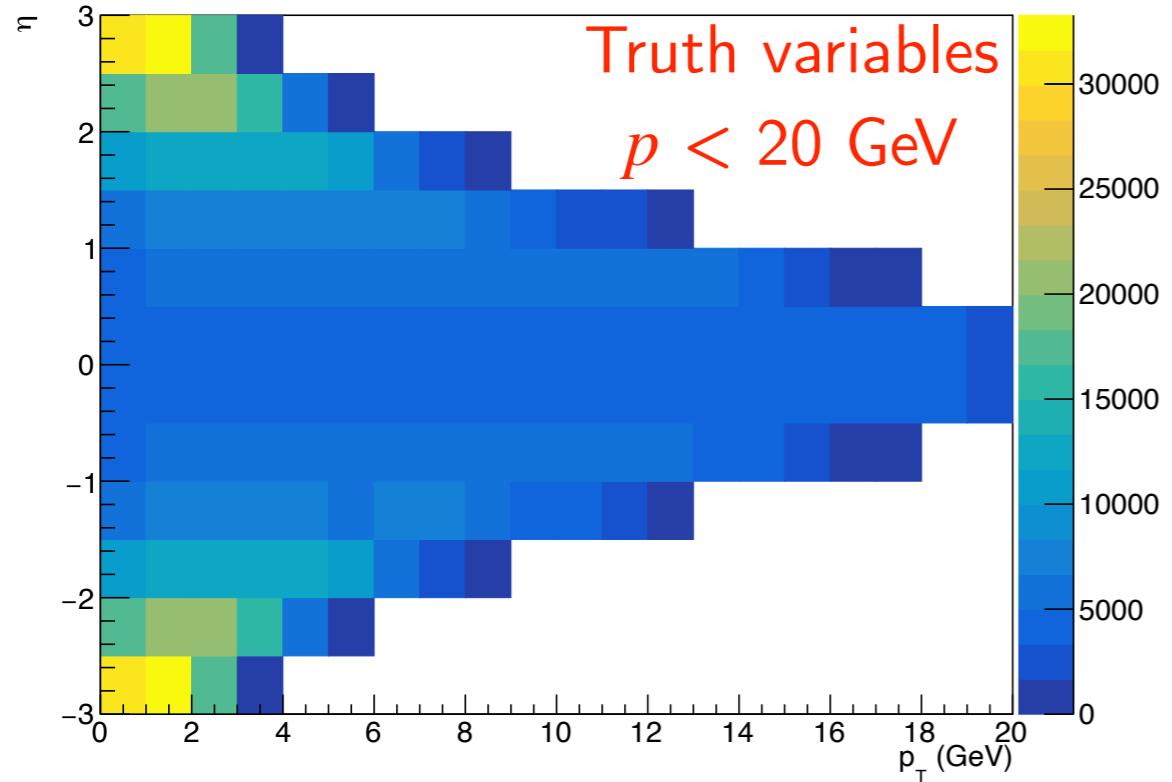
ECCE tracking meeting  
July 16, 2021



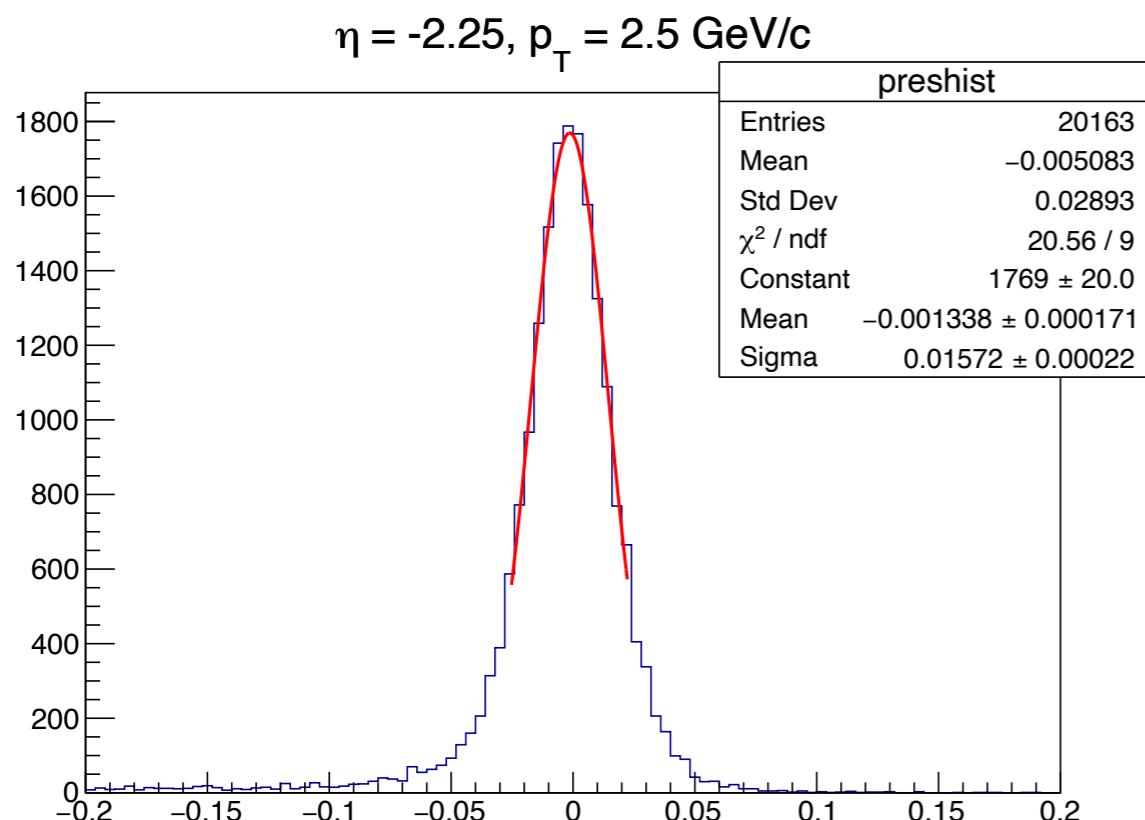
# DIS reconstruction analysis module

- Analyzing single-electron DSTs with DISReconstruction module (brief details given at 3rd software workshop)
- Currently only lepton reconstruction implemented
  - Looking at SvtxTrack node only
- Need to implement calorimeter information

# Resolution from single-electron sample

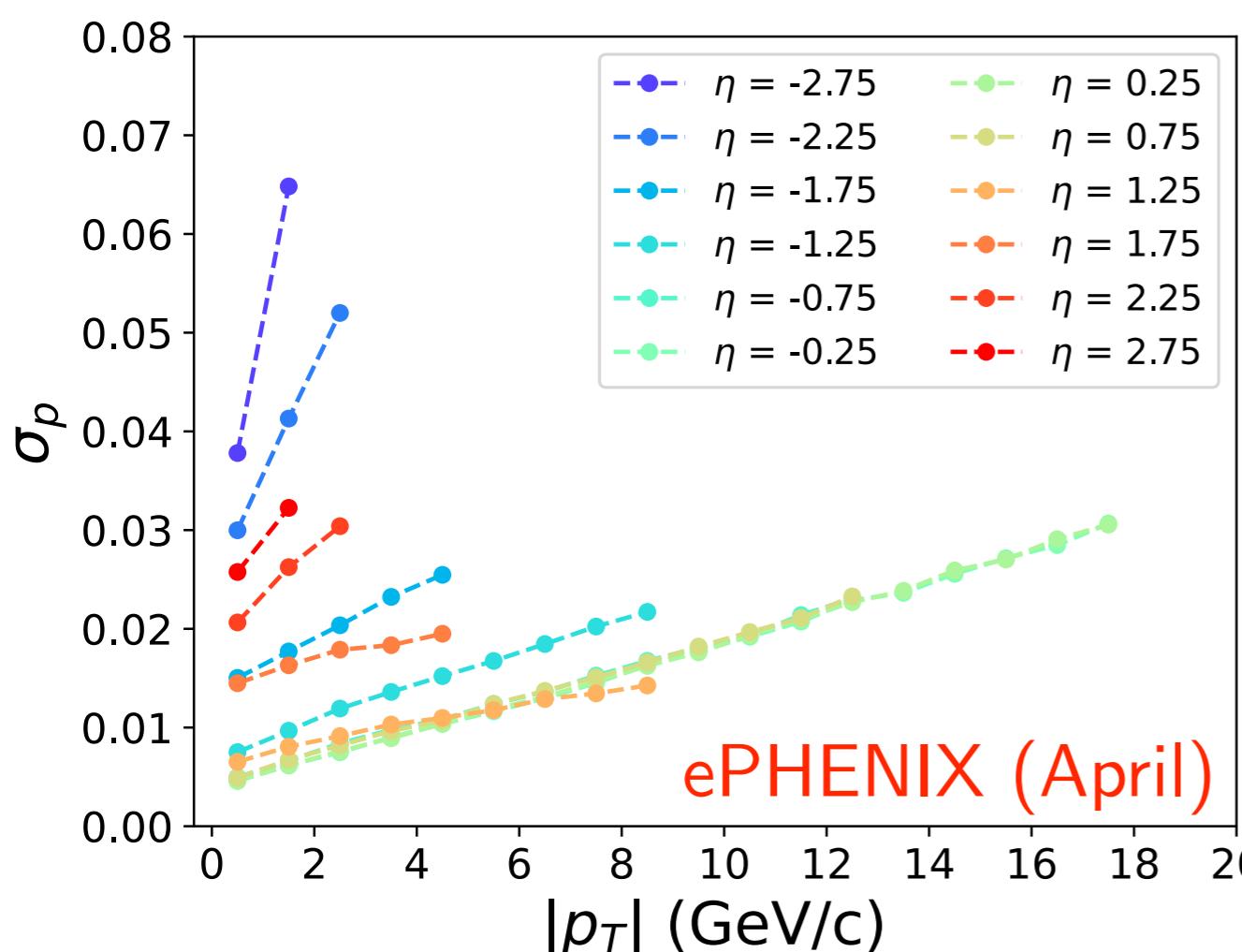


- Bin events in  $(\eta, p_T)$

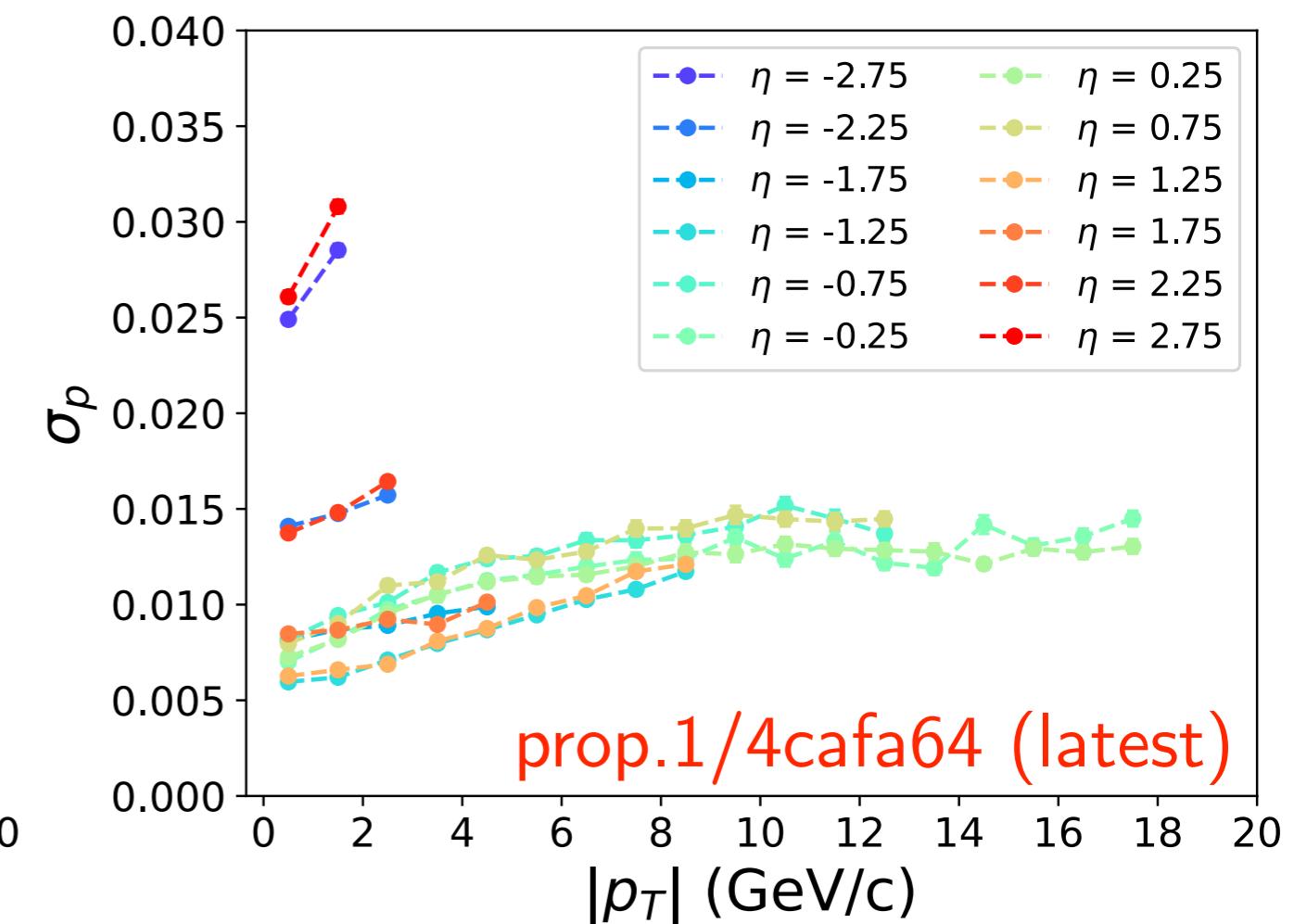
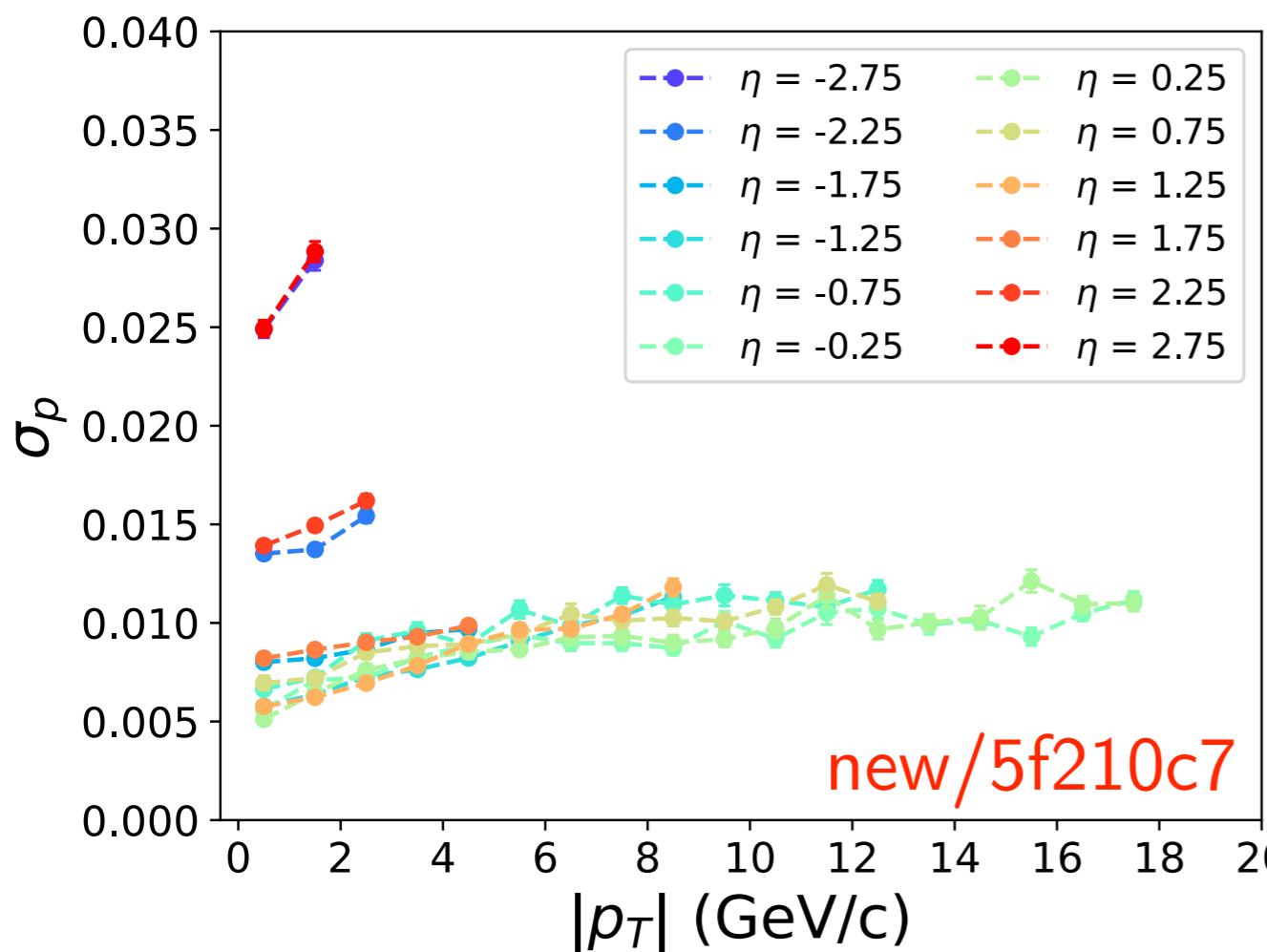


- Extract width of Gaussian fit

$$(p_{rec} - p_{truth}) / p_{truth}$$



# Resolutions vs. $(\eta, p_T)$



# Summary

- Latest ECCE production tag still shows improvement over ePHENIX detector
- In progress: expand DIS analysis module to include calorimeter information, other reconstruction methods