

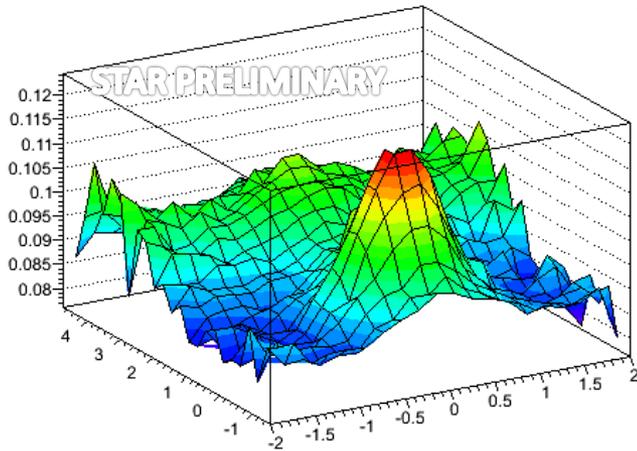
# d+Au ridge at RHIC?

Fuqiang Wang

For the STAR Collaboration

# 2D correlation functions (mixed-event vertex-matched acceptance corrected)

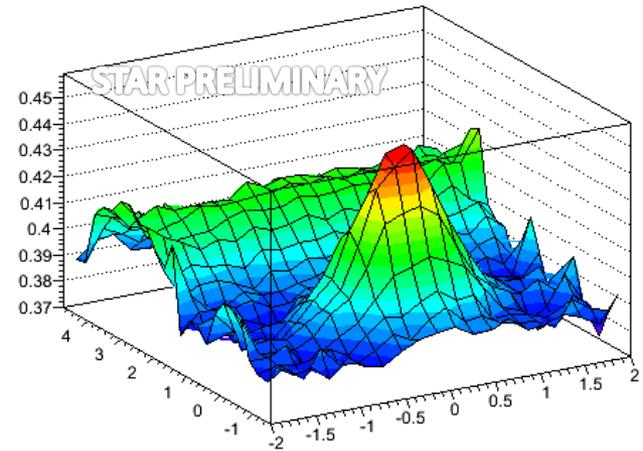
TPC 50-80%,  $1 < p_T < 2$  GeV/c



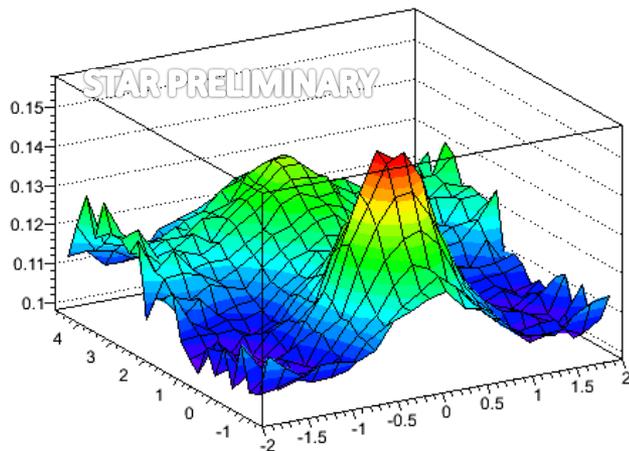
$0.15 < p_T^{\text{trig}} < 3$  GeV/c  
 $1 < p_T^{\text{assoc}} < 2$  GeV/c

TPC mult.  
 $|\eta| < 1$   
as centrality

TPC 0-20%,  $1 < p_T < 2$  GeV/c

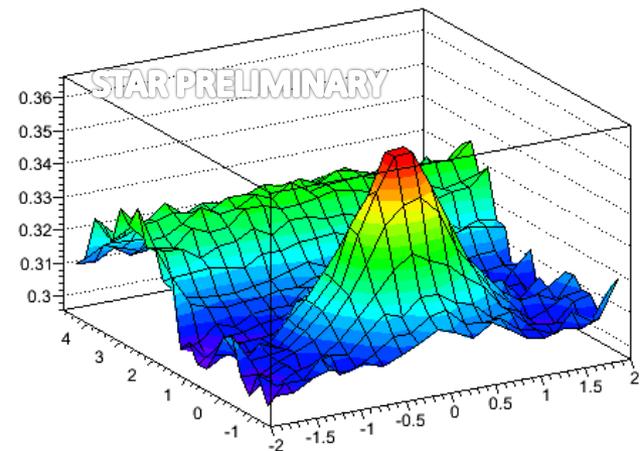


FTPC 40-100%,  $1 < p_T < 2$  GeV/c



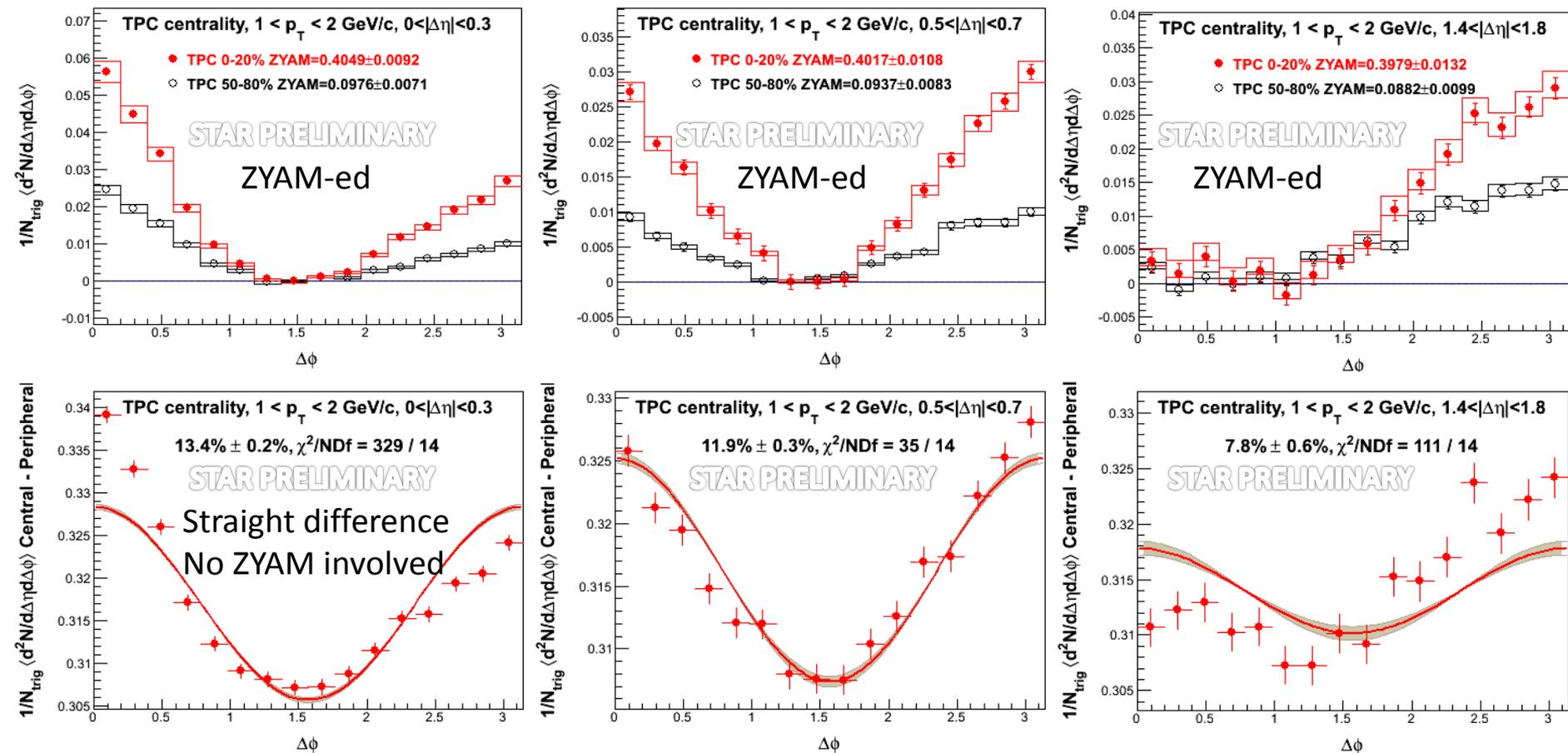
FTPC mult.  
 $-3.8 < \eta < -2.8$   
as centrality

FTPC 0-20%,  $1 < p_T < 2$  GeV/c



# $\Delta\phi$ projections in different $\Delta\eta$ (TPC mult. $|\eta| < 1$ as centrality)

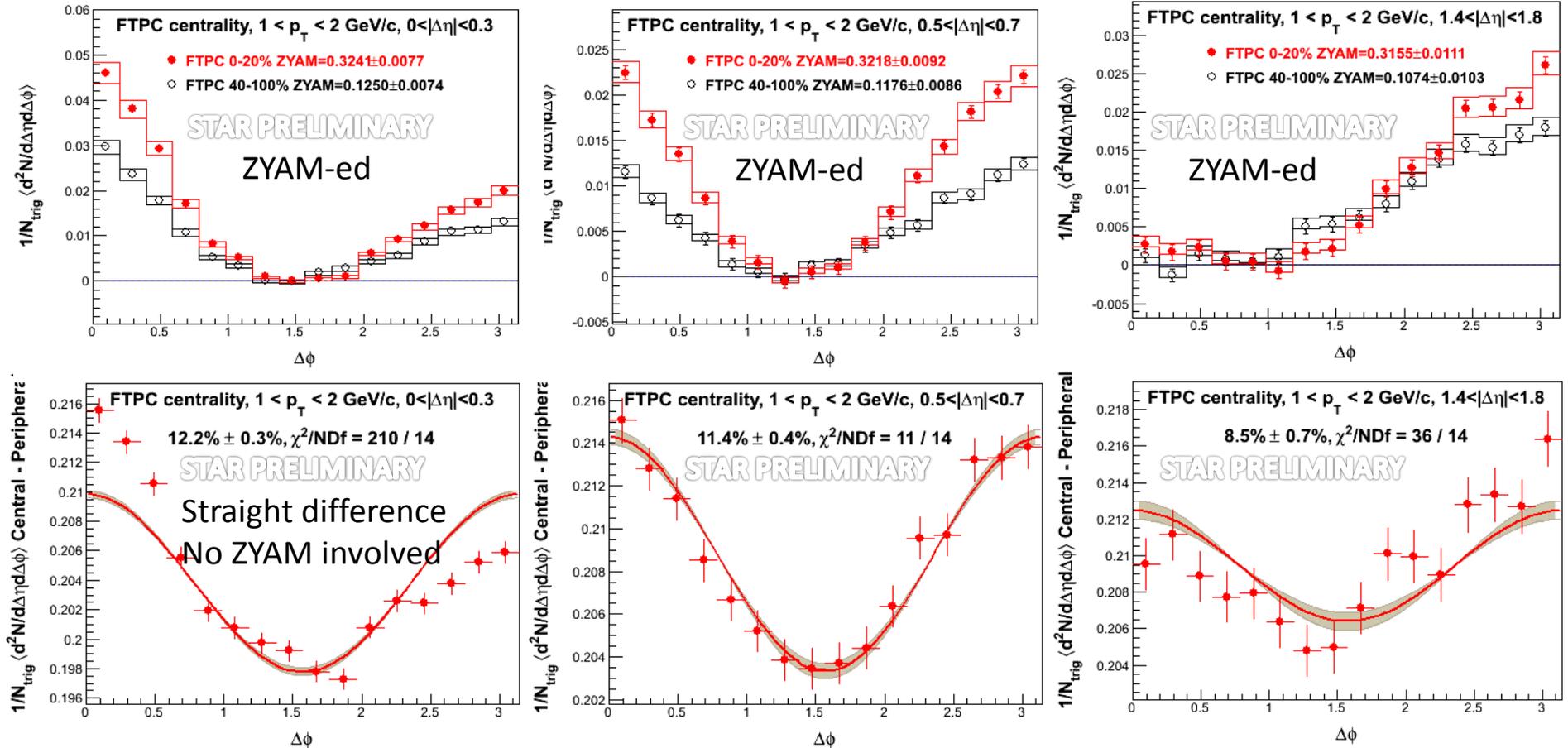
$0.15 < p_T^{\text{trig}} < 3 \text{ GeV}/c, 1 < p_T^{\text{assoc}} < 2 \text{ GeV}/c$



- ZYAM syst. error from different sizes of  $\Delta\phi$  region for ZYAM.
- Efficiency corrected:  $85 \pm 5\%$ .

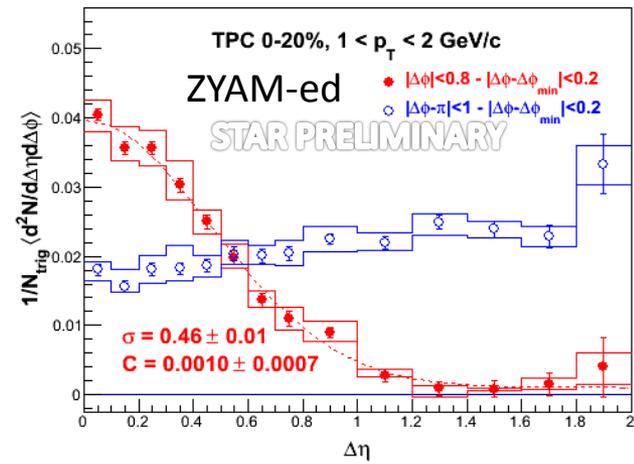
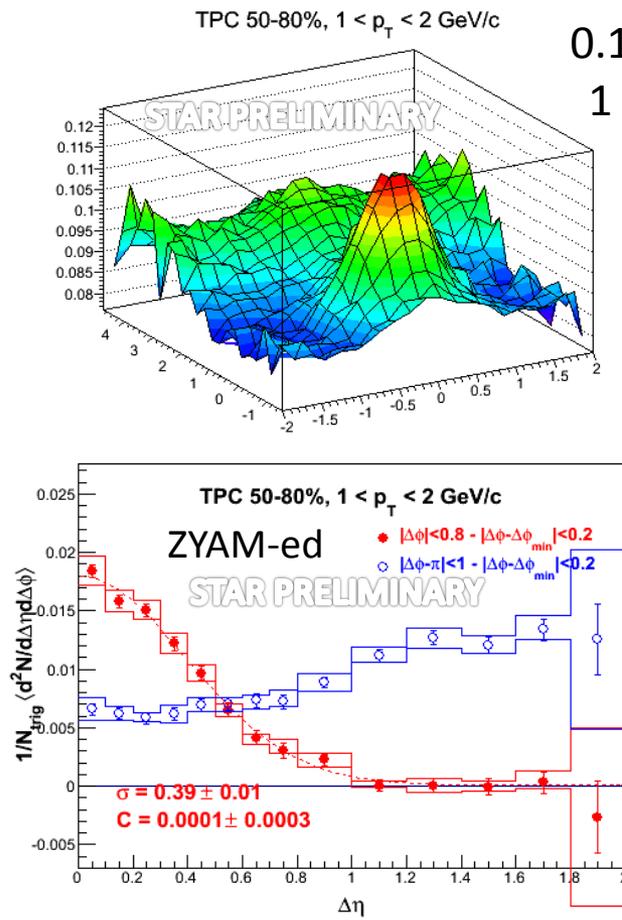
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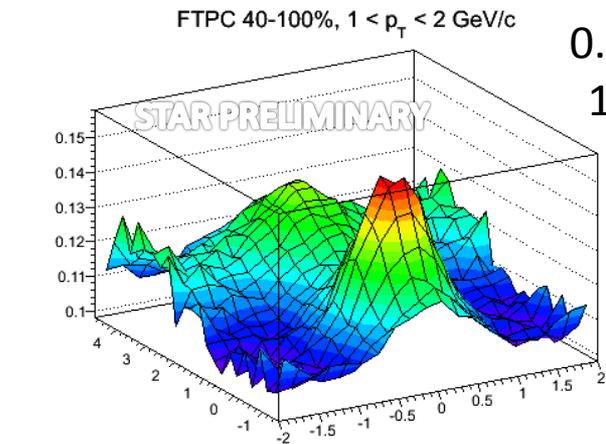
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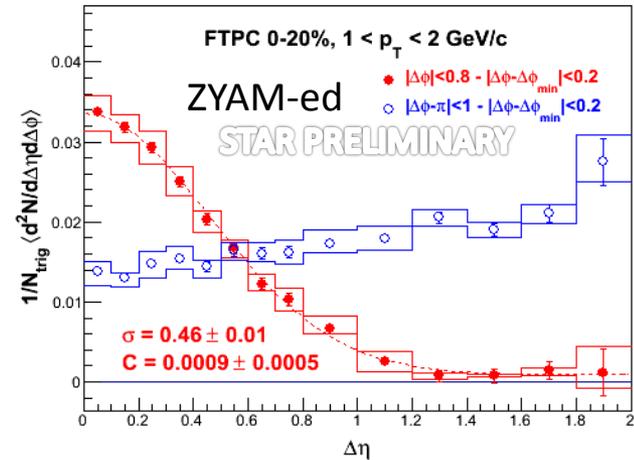
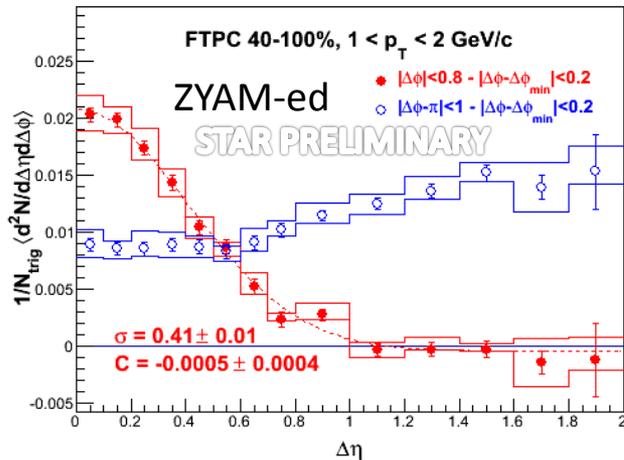
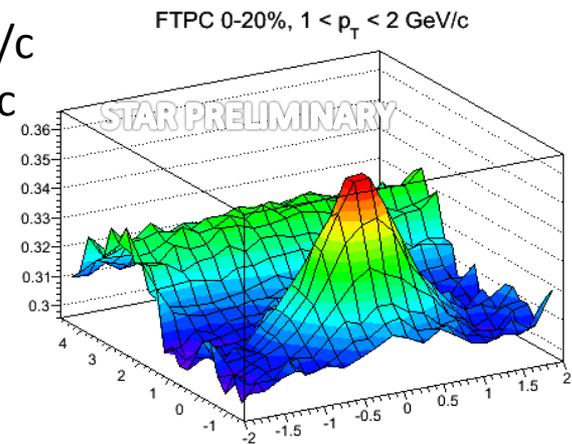


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# $\Delta\eta$ projections in different $\Delta\phi$ (FTPC mult. $-3.8 < \eta < -2.8$ as centrality)



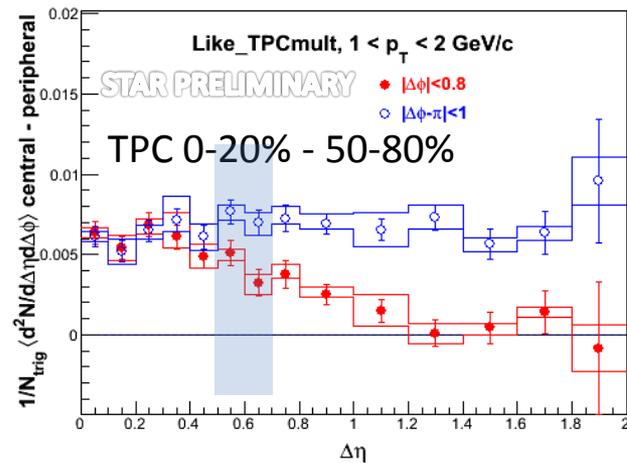
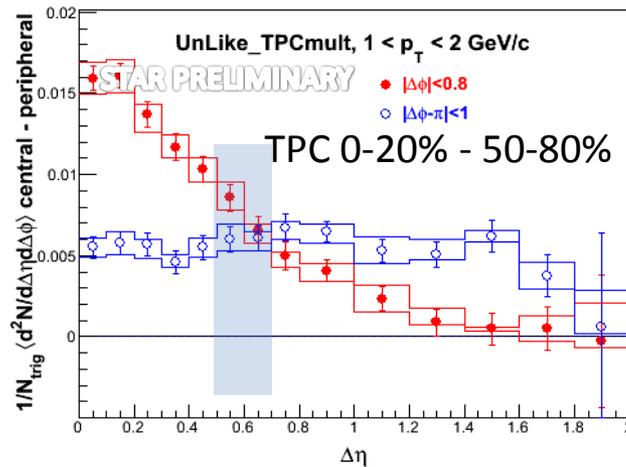
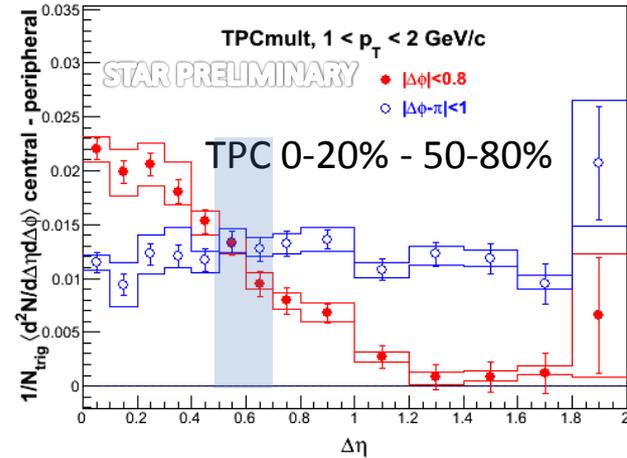
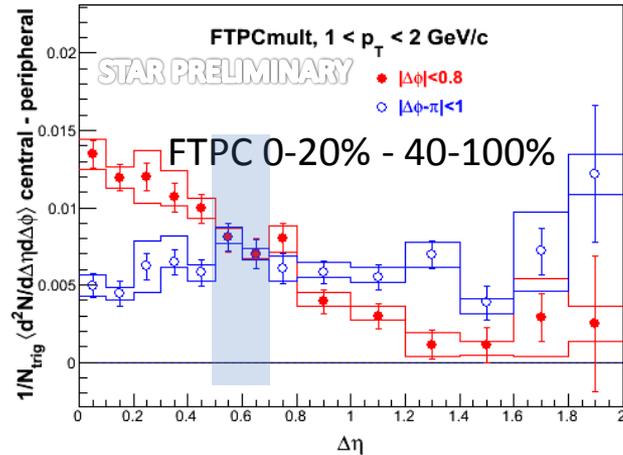
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# Central – Peripheral

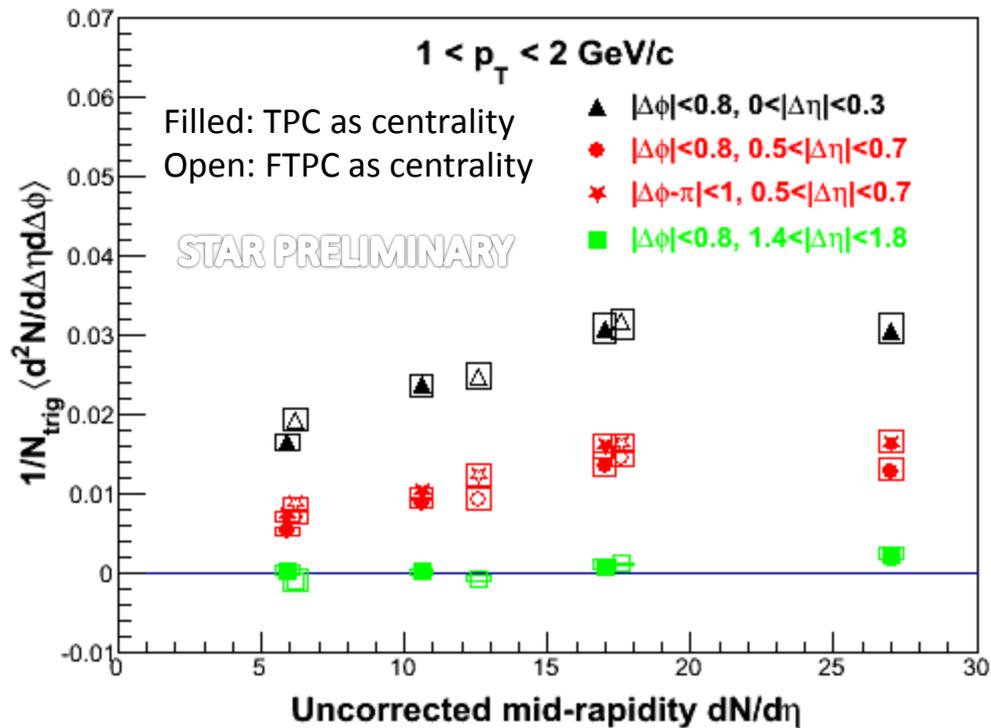
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# Conditional yield vs multiplicity

$$0.15 < p_T^{\text{trig}} < 3 \text{ GeV}/c, 1 < p_T^{\text{assoc}} < 2 \text{ GeV}/c$$



# Summary

- Near-side Gaussian peak in  $\Delta\eta$ .  
Away-side approximately flat.
- Near-side large- $\Delta\eta$  yield consistent with zero.
- Central – peripheral excess resembles near- and away-side shapes and charge ordering.
- d+Au data consistent with jet phenomenology.  
Large multiplicity events  $\rightarrow$  larger-energy jets?