

Inclusive J/ψ R_{pA} Run15 Update

Ziyue Zhang

BHT2*BBCMB – Raw Yield with new Pico

- Dataset: Run15 pp (pAu) @200GeV

- Cuts applied:

- Event level

- $|\text{TPCVz}| < 80\text{cm}$
 - $0.52 < \text{RatioFit} < 1.02$
 - $\text{Ranking} > 0$

- Tracking

- $20 \leq \text{nHitsFit} \leq 50$
 - $10 \leq \text{nHitsDedx} \leq 50$
 - $|\eta| < 1$
 - $0.2 \text{ GeV}/c < p_T < 50 \text{ GeV}/c$
 - $0 < \text{dca} < 1$
 - $-1. < \text{nSigmaE} < 2.$

- eld

- $1 \text{ GeV}/c < p_T < 50 \text{ GeV}/c$
 - $0.5/c < E/p < 2/c$
 - $e > 0.1 \text{ GeV}$

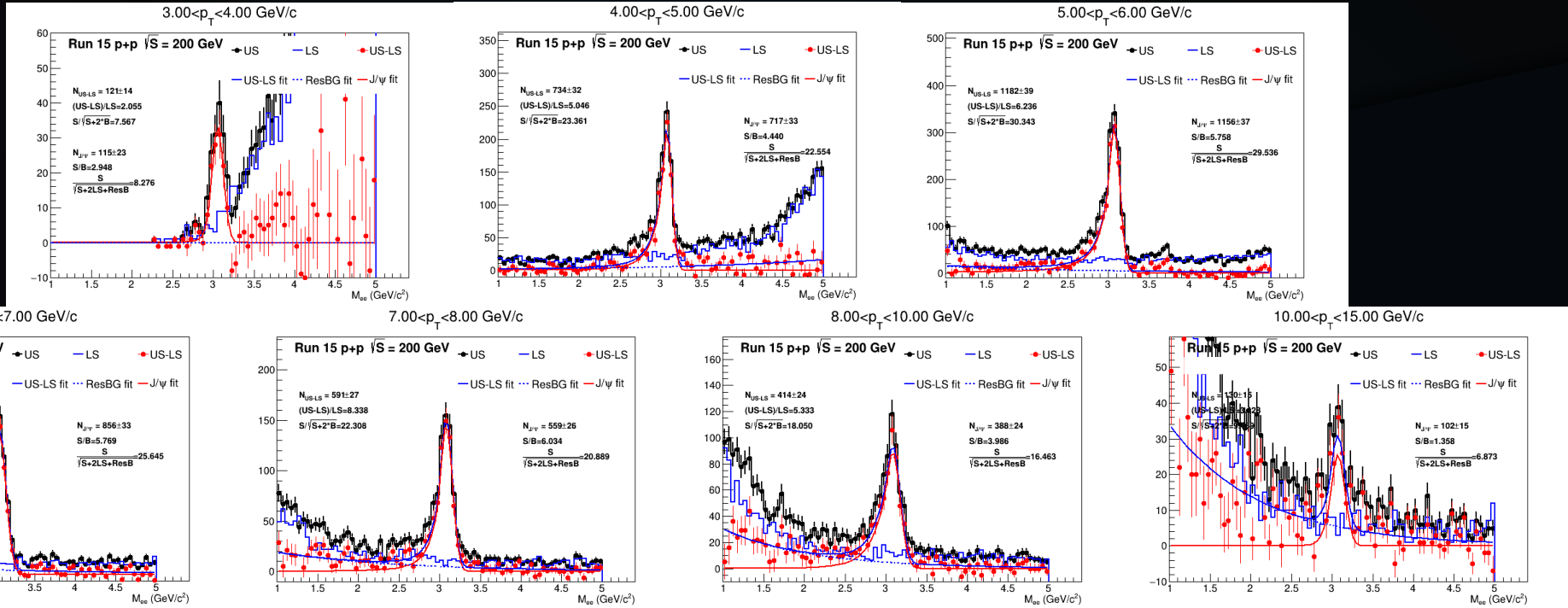
- Trigger

- $3.5 \text{ GeV}/c < p_T < 50 \text{ GeV}/c$
 - $\text{adc0} \geq 300$

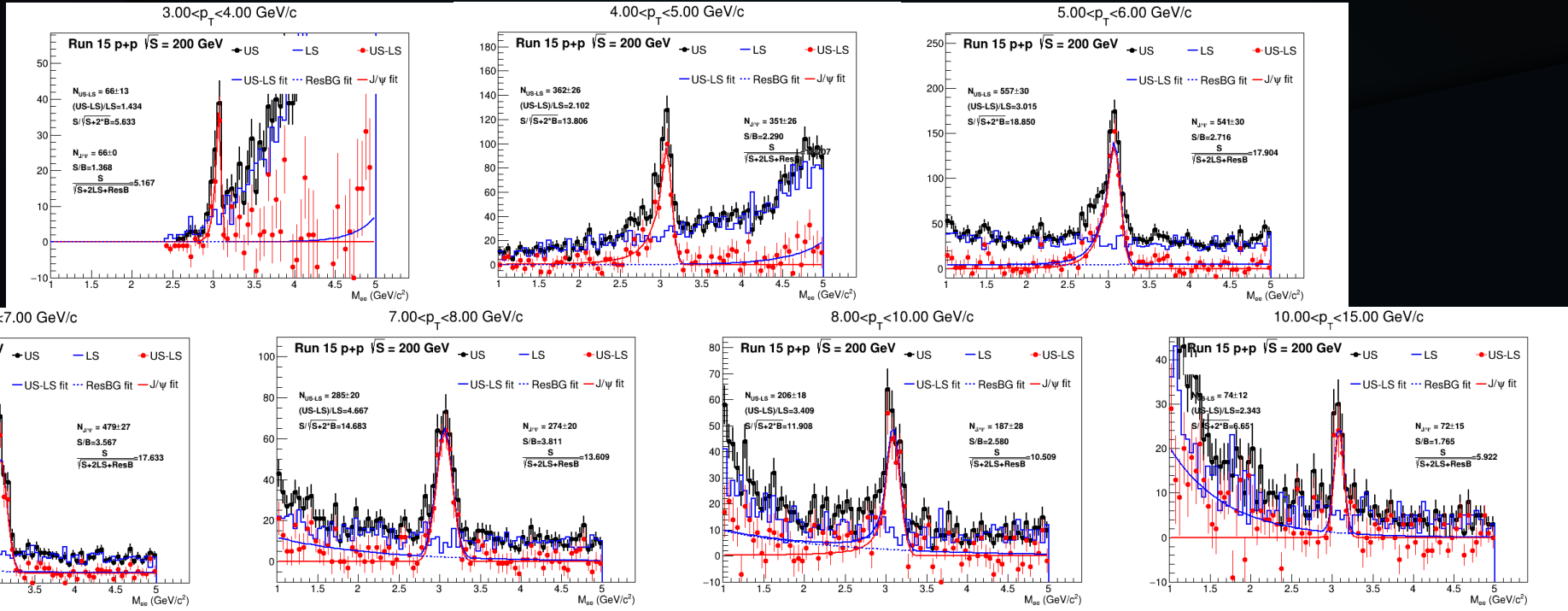
- Paired

- $1 \text{ GeV}/c^2 < M < 5 \text{ GeV}/c^2$ (range)
 - $|y| < 1$
 - $p_T < 15 \text{ GeV}/c$

BHT2*BBCMB – Raw Yield - pp



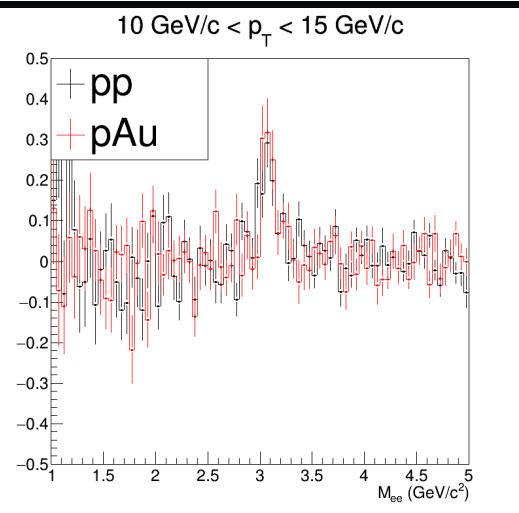
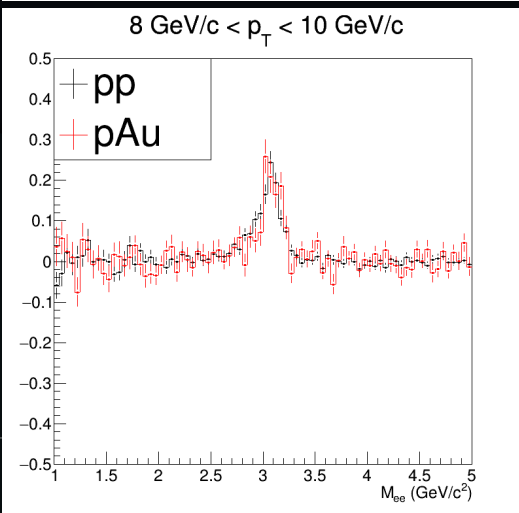
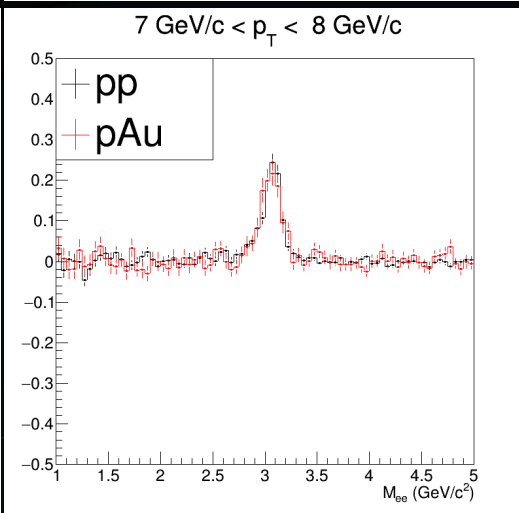
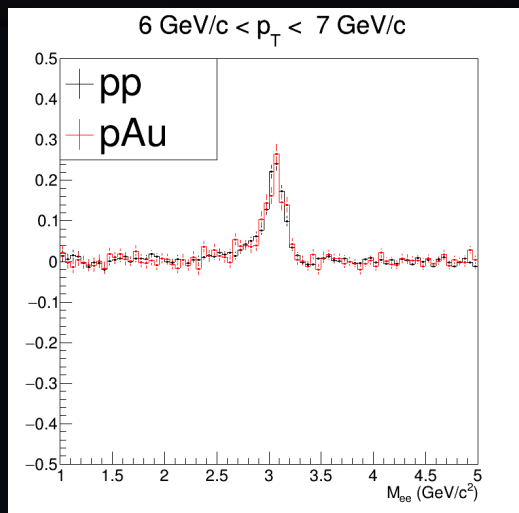
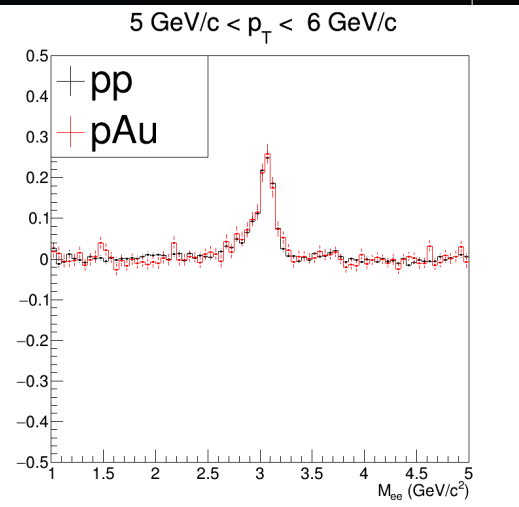
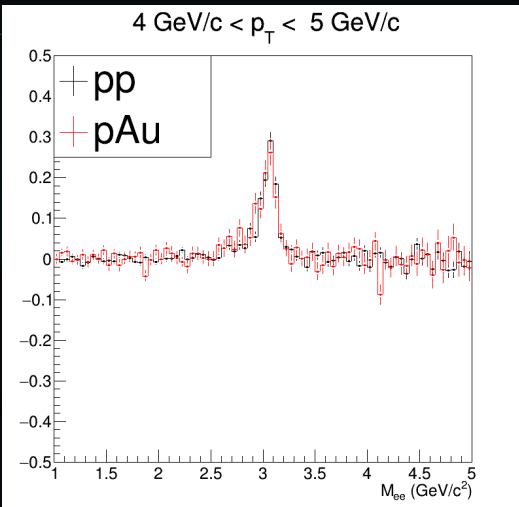
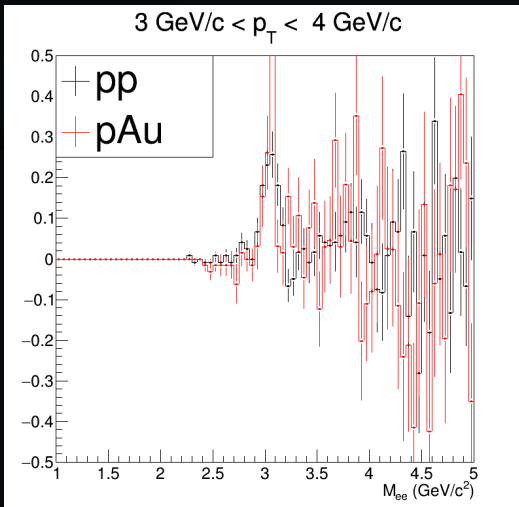
BHT2*BBCMB – Raw Yield - pAu



Production of updated Pico for pAu are not finished.
 These are plots only include the first 800 runs.

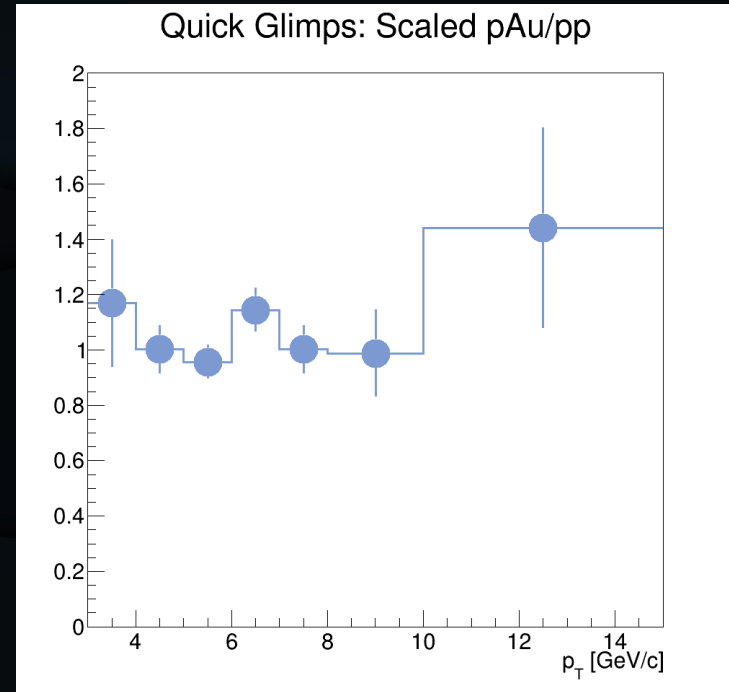
Signal Shape Compare: US-LS-Res

Each histogram is
Scaled by:
 $1/\text{Integral}(2.9\text{GeV}/c^2,$
 $3.2\text{GeV}/c^2)$



Scaled Rawyield Ratio: Glimpse of Uncertainty

- Scale factor: including factors of N_{mb_eqv} , trigger bias factor, and portion of files processed



Scaled Rawyield Ratio: Glimpse of Uncertainty

- Unprofessional conduct warning
 - p8: overlap view of this analysis (raw yield ratio) and di-muon (run15) preliminary result of R_{pA}
 - p9: overlap view of this analysis (raw yield ratio) and di-muon (run15) paper proposal plots of R_{pA}

