

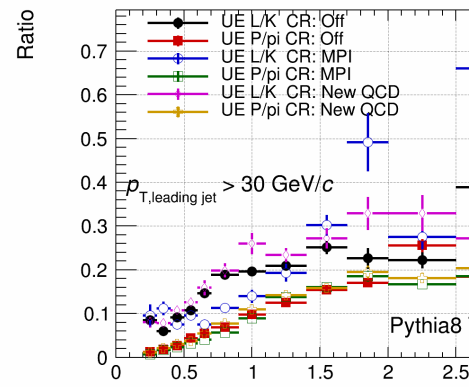
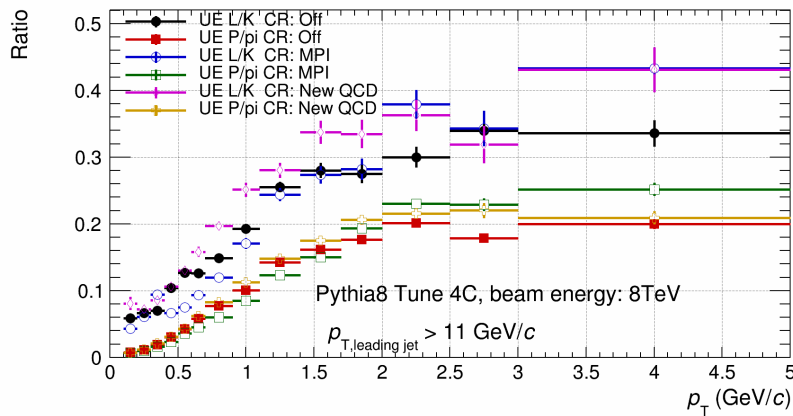
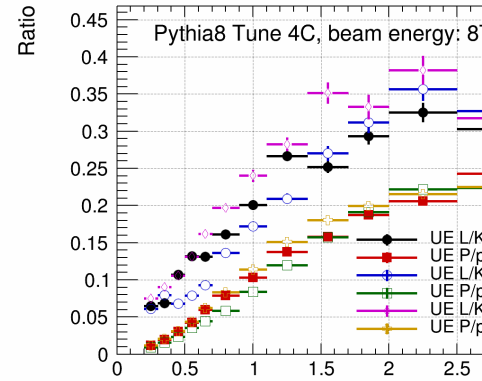
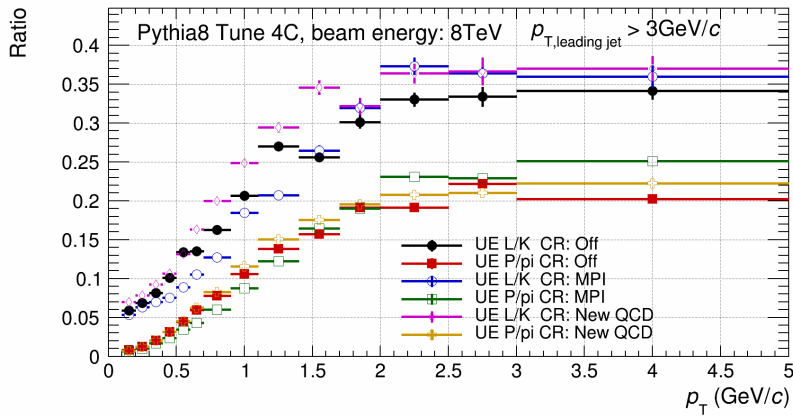
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1.1 Inclusive baryon/meson ratio

Please Check the 2.2 and 2.3 below

1.2 UE - Band Method



Estimate UE in the band region have a relation : $\pi/3 < \Delta\Phi < 2\pi/3$ and $\eta < \eta_{\text{jet}}$

2. Two CR mode effect in Soft and Hard QCD

2.1 Configure

Pythia8, Tune 4C, energy 8TeV, 0.5M Events in soft QCD, and 0.5M Events in each pt hard bin in Hard QCD

CR : MPI / New QCD

Generator : pythia 8, version 8029

Process : Hard QCD : open all Hard QCD process (HardQCD:all = on) / Soft QCD : open all soft QCD process (SoftQCD:all=on)

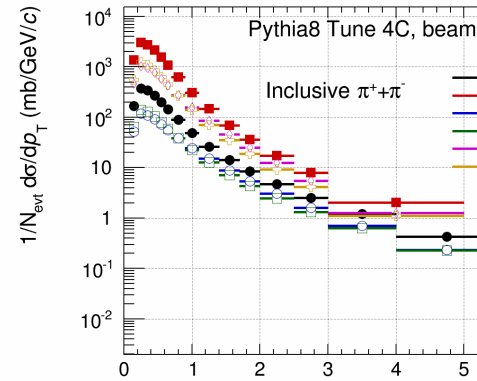
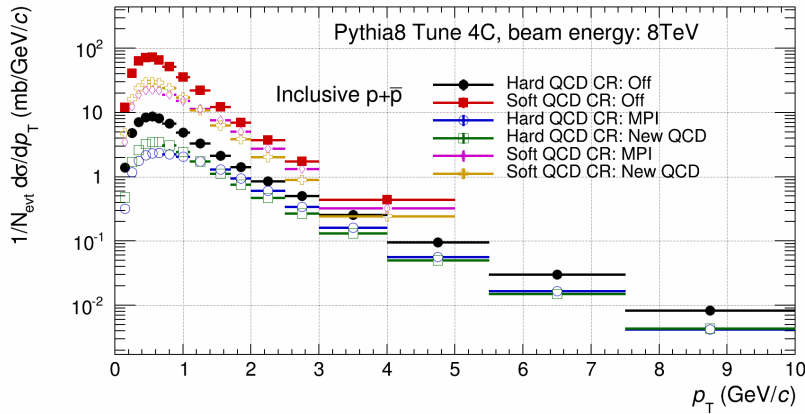
Tune : Tune 4C

Events : 0.5M events per pt hard bin for HardQCD / 0.5M events for SoftQCD

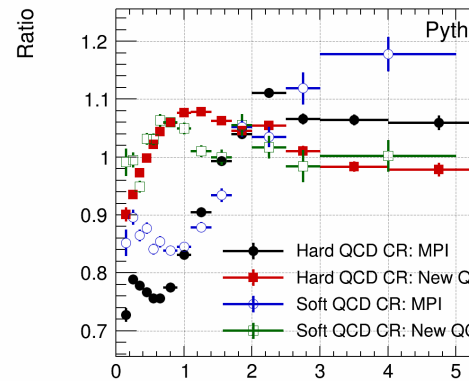
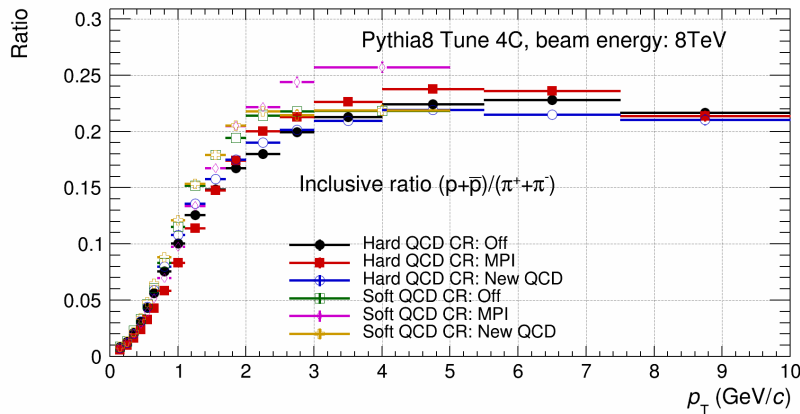
Special Cut: Decay time less than 10 mm/c (ParticleDecays:tau0Max = 10) which used to select Lambda/kshort

2.2 Inclusive proton/pi on Ratio w and w/o CR

These four plots show the Information about inclusive proton/pi on Ratio w/ and w/o CR



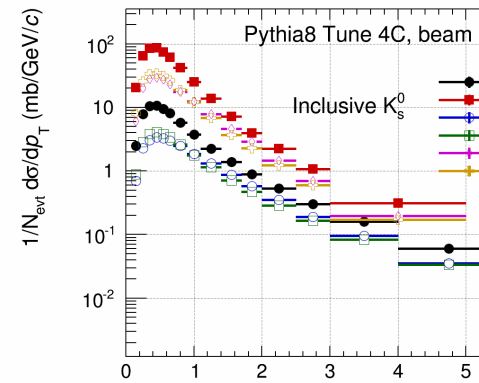
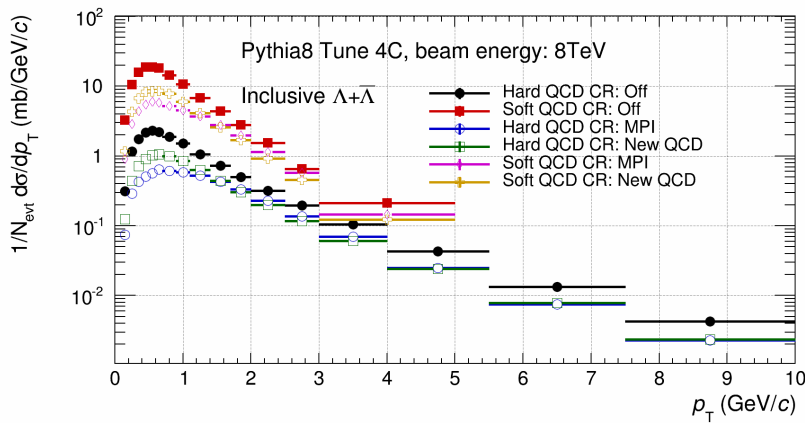
The first two plots show the inclusive spectra of proton and pi, Soft QCD w/ a $p_T < 5 \text{ GeV}/c$ cut and Hard QCD w/ a $p_T < 10 \text{ GeV}/c$



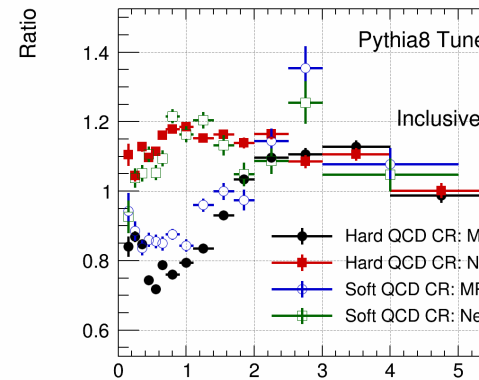
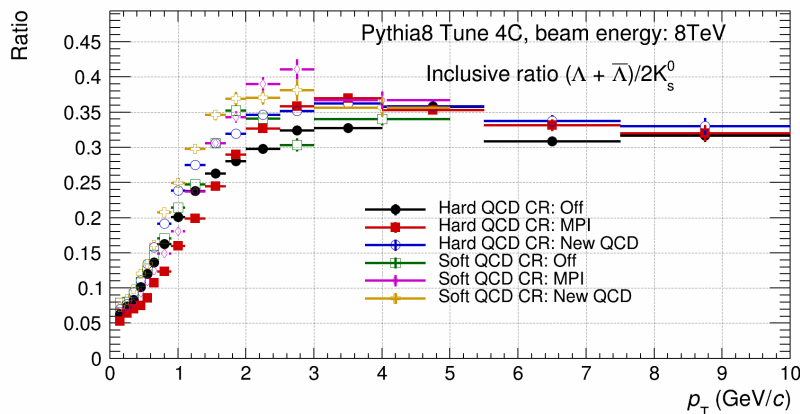
The third one is the inclusive proton/pi on Ratio w/ and w/o CR, and the last one is the ratio with CR on over CR off

2.3 Inclusive Lambda/ Kshort Ratio w and w/o CR

These four plots show the Information about inclusive Lambda/ Kshort Ratio w/ and w/o CR



The first two plots show the spectra of inclusive lambda and kshort, Soft QCD w/ a $p_T < 5 \text{ GeV}/c$ cut and Hard QCD w/ a $p_T < 10 \text{ GeV}/c$



The third one is the inclusive Lambda/ Kshort Ratio w/ and w/o CR, and the last one is the ratio with CR on over CR off

3 Conclusion

Different CR modes have a large influence in lower p_T than high p_T , in baryon/meson plots

This topic: `Min > CR_Study`

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