Lambda Hyperon in Xe+W

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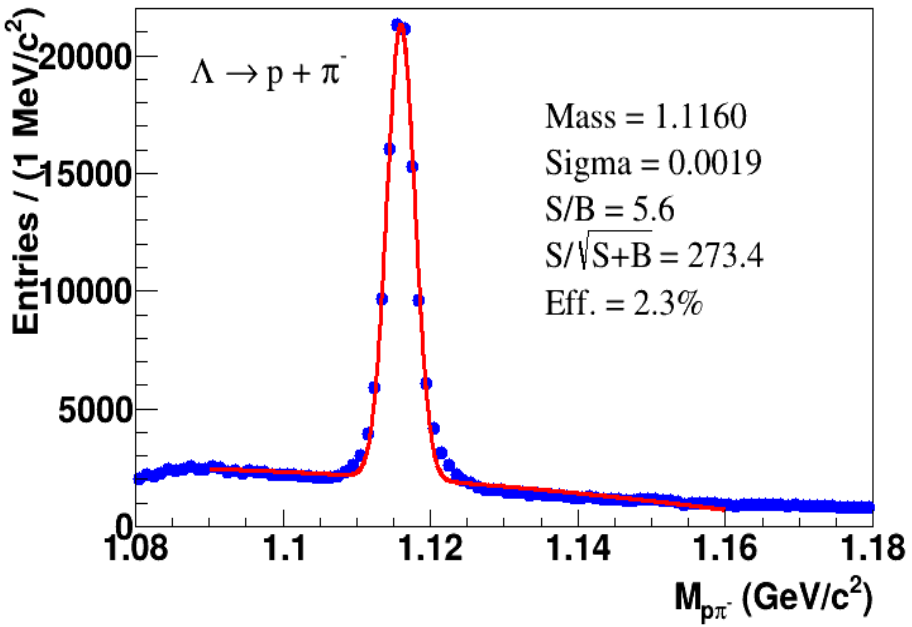
Data Set

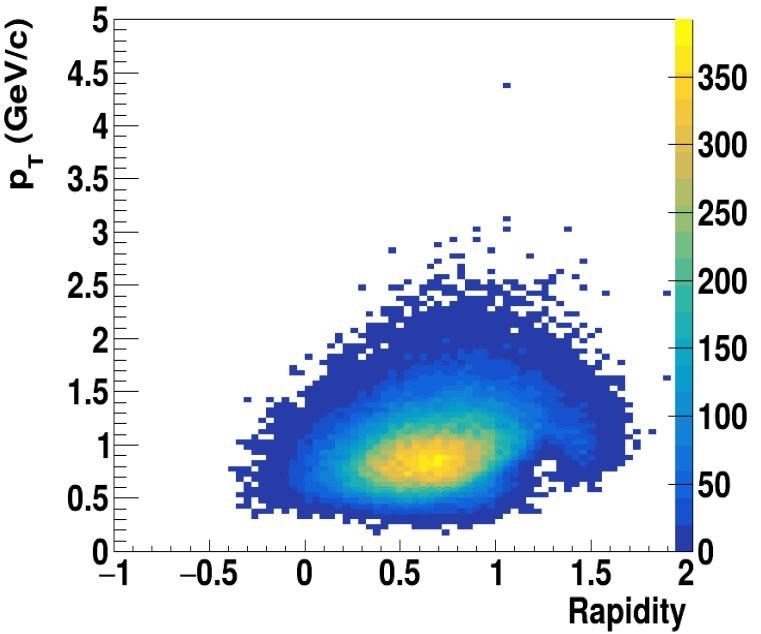
- ✓ **Generator: UrQMD** /eos/nica/mpd/sim/data/exp/dst-XeW-02.5GeV-mp08-24-500ev-req35/XeW/02.5GeV-ft/urqmd/XeW-02.5GeV-mp08-24-500ev-req35/urqmd-XeW-02.5GeV-mb-eos0-500-…..reco.root
- ✓ **Reconstruction & Analysis:** hyperon wagon in the analysis train

Selection cuts

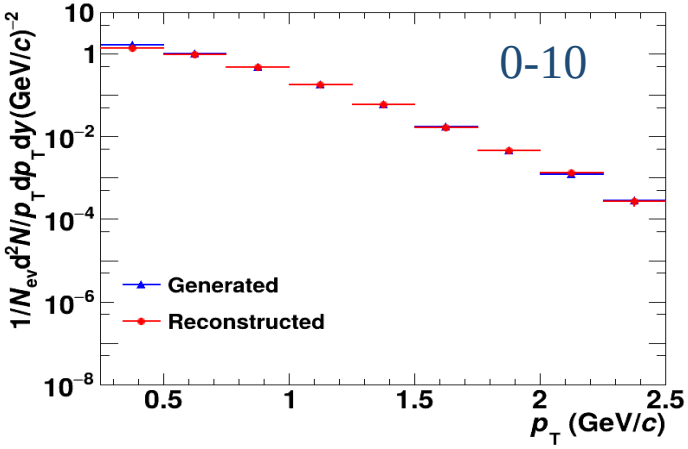
- ✓ l0.chi2s[][0] > 25.0 – normalized π^--to-primary vertex impact parameter
- ✓ l0.chi2s[][1] > 11. – normalized proton-to-primary vertex impact parameter
- ✓ l0.chi2h < 10. – chi2 of secondary vertex reconstruction
- ✓ l0.disth < 0.8 – distance of the closest approach
- ✓ l0.path > 3. – lambda decay path
- ✓ l0.angle < 0.04 – lambda momentum and primary-to-secondary vertex vector noncollinearity

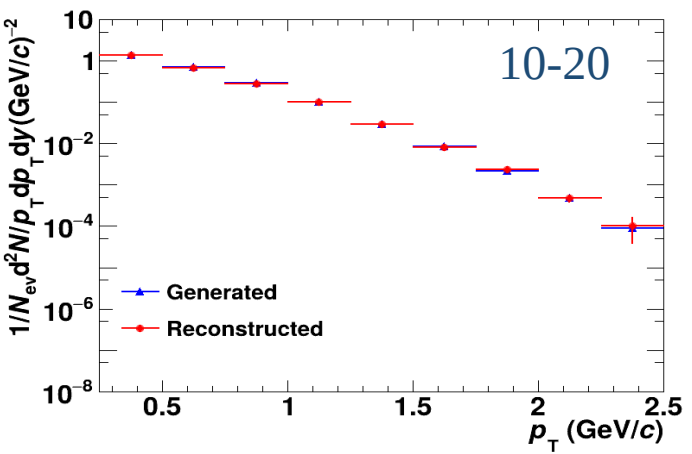
Invariant mass Λ and Phase Space

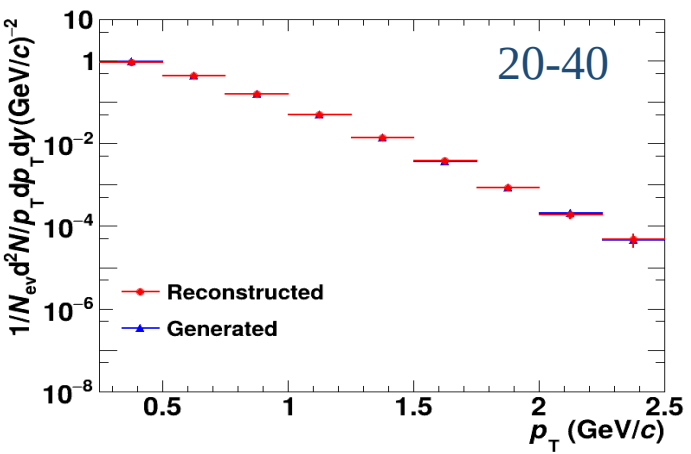


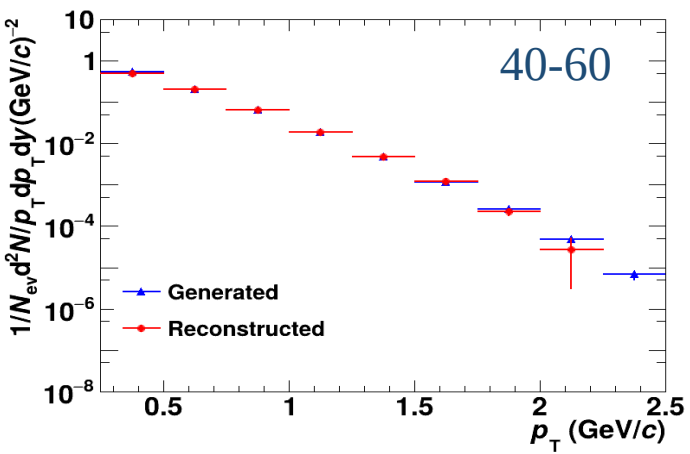


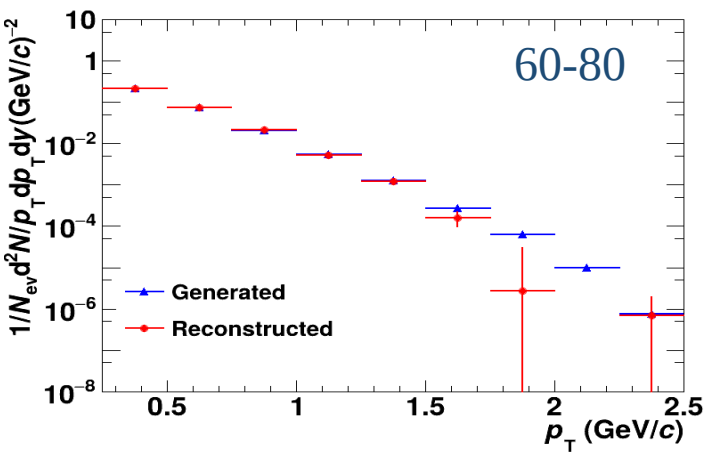
Invariant p_T -spectrum of Λ in centrality bins

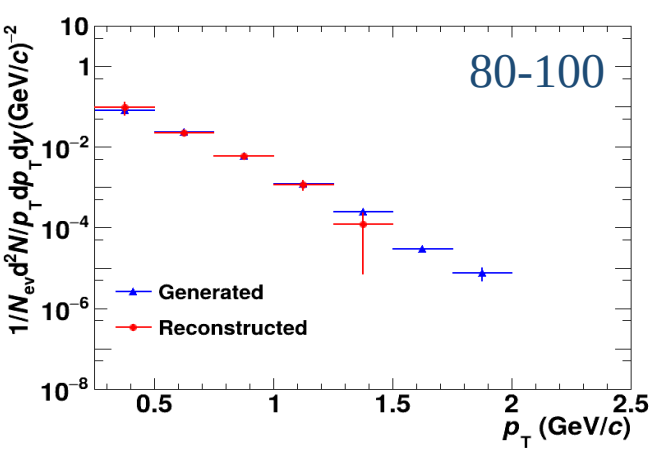




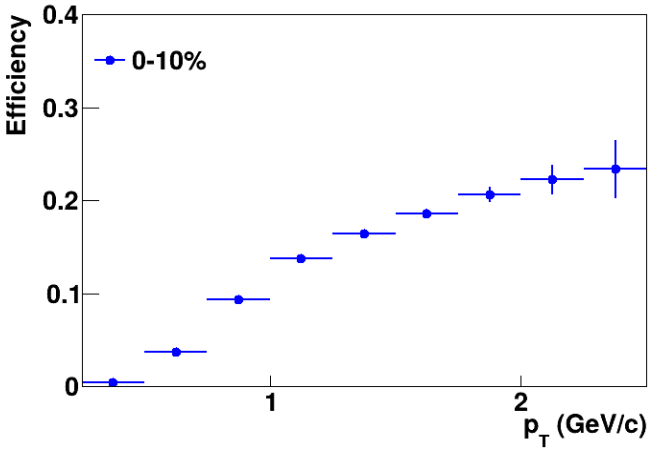


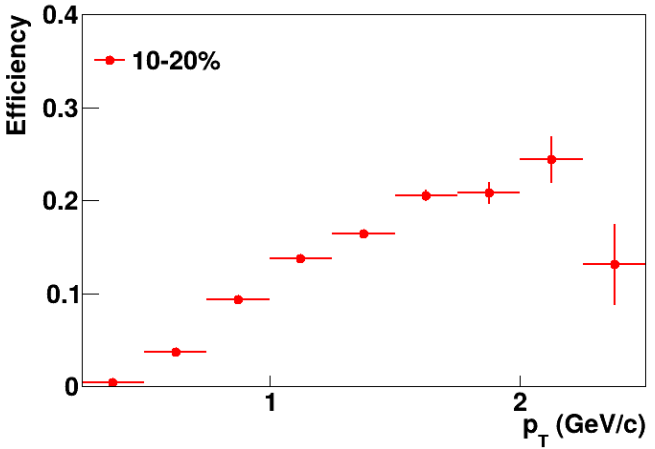


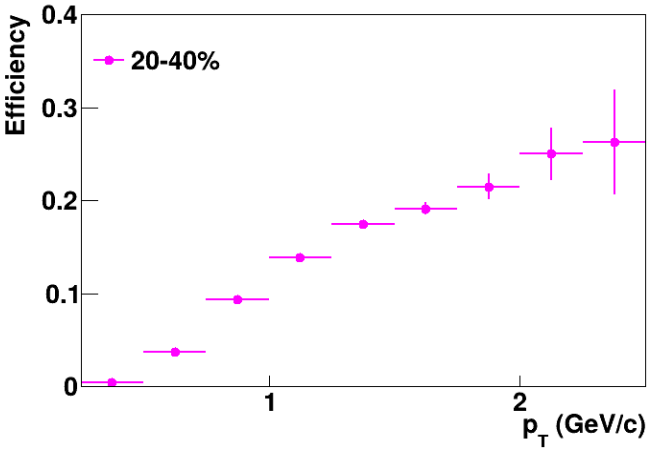


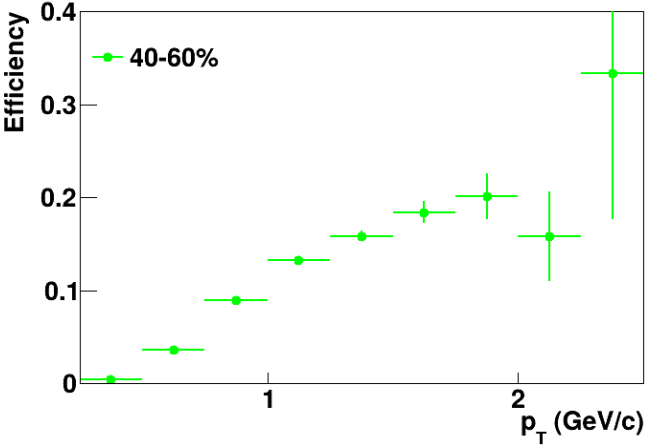


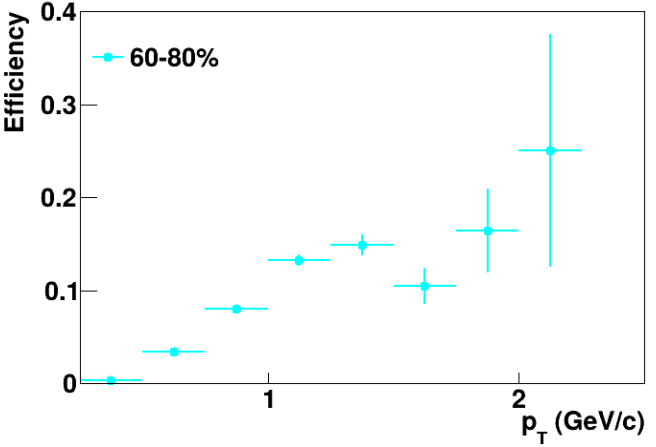
Efficiency

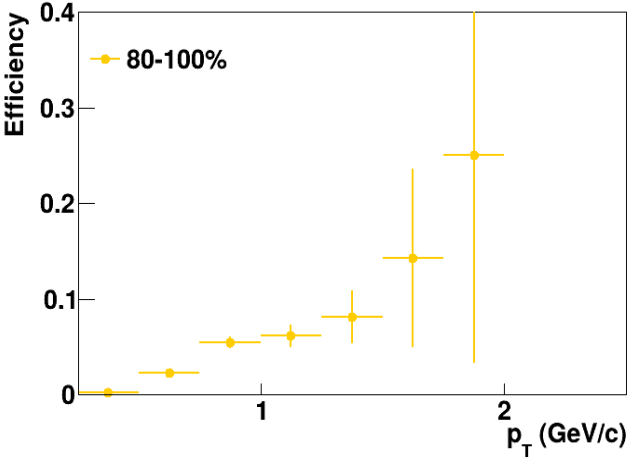

Efficiency
0-10%
0.4
0.3
0.2
0.1
0
1
2
p_T (GeV/c)

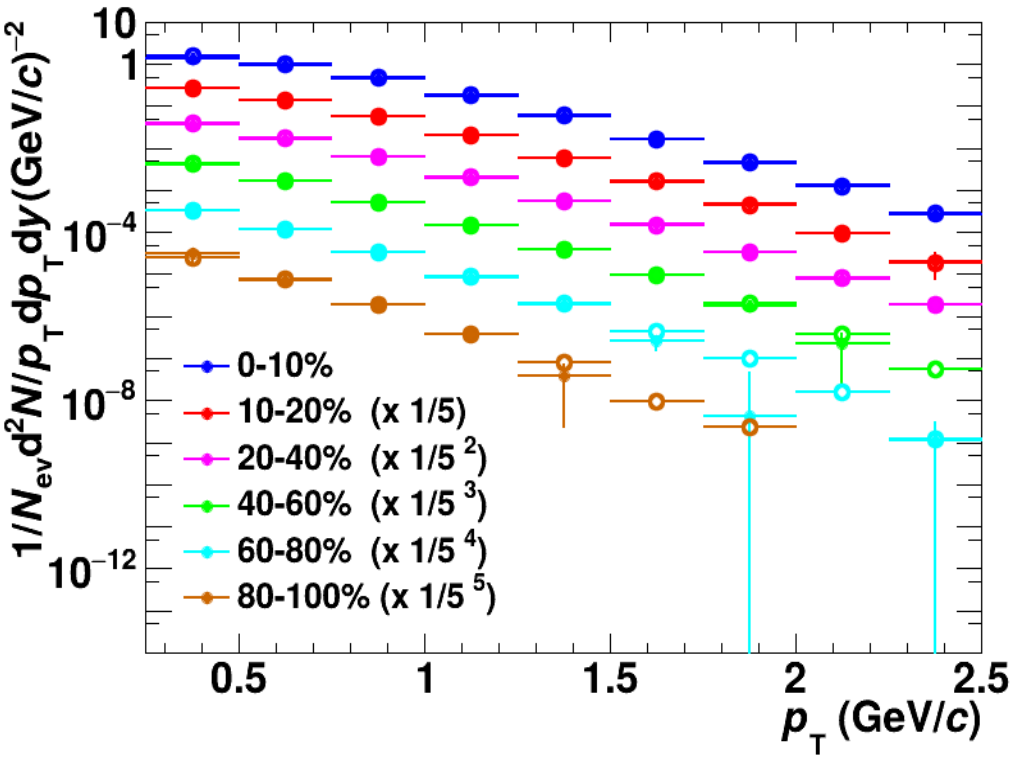

Efficiency
10-20%
0.4
0.3
0.2
0.1
0
1
2
p_T (GeV/c)


Efficiency
20-40%
0.4
0.3
0.2
0.1
0
1
2
p_T (GeV/c)


Efficiency
40-60%
0.4
0.3
0.2
0.1
0
1
2
p_T (GeV/c)


Efficiency
60-80%
0.4
0.3
0.2
0.1
0
1
2
p_T (GeV/c)


Efficiency
80-100%
0.4
0.3
0.2
0.1
0
1
2
p_T (GeV/c)


$1/N_{ev} d^2N/p_T dp_T dy (GeV/c)^{-2}$
10
1
10^{-4}
10^{-8}
10^{-12}
0-10%
10-20% (x 1/5)
20-40% (x $1/5^2$)
40-60% (x $1/5^3$)
60-80% (x $1/5^4$)
80-100% (x $1/5^5$)
0.5
1
1.5
2
2.5
p_T (GeV/c)

The end .....