

# Sample of 4.5 M Minimum Bias Au+Au Collisions

AuAu MB cross section (b)	6.8	6.8b
Ncoll per MB AuAu event	250	
pp cross section sigma_pp(b)	3.91E-02	39 mb
10-Gev jet cross section from wiki	3.21E-06	3.2mub
NAuAu	4.50E+06	45 M events
Npp Equivalent= NAuAu *Ncoll	1.13E+09	1 B events
N 10 Jet events in 1 B sampled pp collisions	9.25E+04	
we assume jet RAA=1		

4.5 M AuAu MB events would produce a 10GeV jet sample with 92,000, we will round this up to 100,000

# Jet Spectrum $R=0.4$ calo jets (em-scale) for 100,000 events of the 10-GeV jet sample

We analyzed 100,000 events of the 10 GeV Pythia jet sample\*

This corresponds to the expected jet spectrum for 4.5 AuAu million events assuming jet  $R_{AA}=1$

\* This sample was generated with a  $p_{T\_Hat\_Min}=7\text{GeV}$  and the requirement of a true jet with  $p_T > 10\text{ GeV}$  jet in the event, so looking at jets below 8 GeV (adjusting for JES) is meaningless.

