Invariant mass distribution for different MF scaling before XGB selection XGB selected signal 27.5% MF, 3.3A GeV/c 27.5% MF, 3.3A GeV/c 300000-56% MF, 3.3A GeV/c 56% MF, 3.3A GeV/c 3000 100% MF, 12A GeV/c 100% MF, 12A GeV/c 250000 2500 DCM-QGSM-SMM, Au+Au @12 AGeV/c; 10k events 200000-2000 Counts 150000 100000-1000 50000 500 DCM-QGSM-SMM, Au+Au @3.3 AGeV/c; 10k events 0 0 0.6 0.5 0.3 0.4 0.7 0.8 0.9 1.0 Mass (GeV/ c^2)