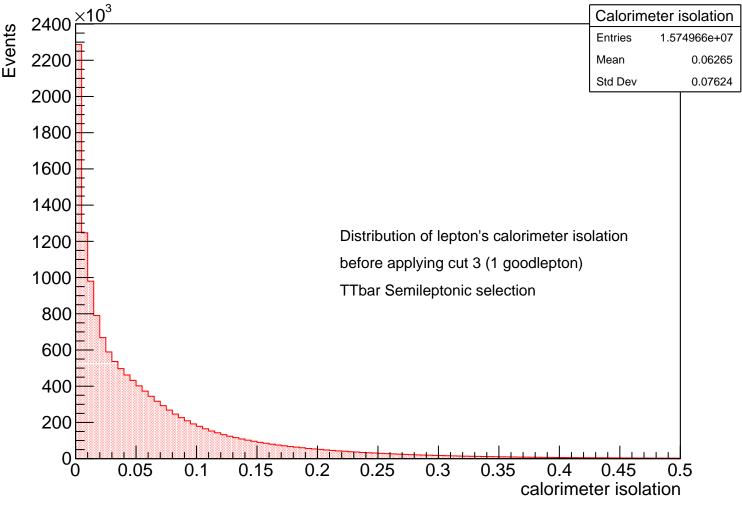
Cutflow ×10⁶ Cutflow Events Entries 4.102267e+07 Mean 1.935 14 Std Dev 0.8183 12 10 8 Number of events passing each cut 6 TTbar semileptonic selection 4 2 10 Cut

Leptons pT Distribution $\times 10^3$ Leptons pT 1000 **Entries** 1.574966e+07 Mean 36.85 Std Dev 12.72 800 600 Distribution of lepton's pT before applying cut 3 (1 goodlepton) 400 TTbar Semileptonic selection 200 0, 20 40 60 80 100 120 pT [GeV]

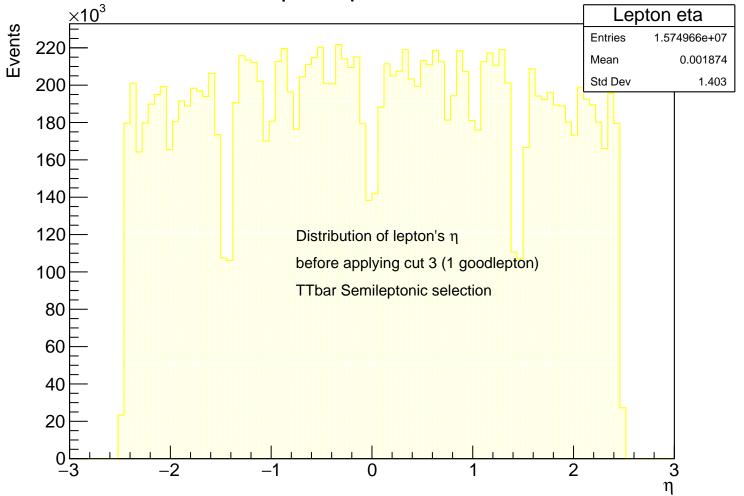
Track Isolation Distribution $\times 10^3$ Track isolation Entries 1.574966e+07 10000 Mean 0.03879 Std Dev 0.0822 8000 6000 Distribution of lepton's track isolation before applying cut 3 (1 goodlepton) TTbar Semileptonic selection 4000 2000 0, 0.05 0.15 0.2 0.25 0.3 0.35 0.45 0.1 0.4

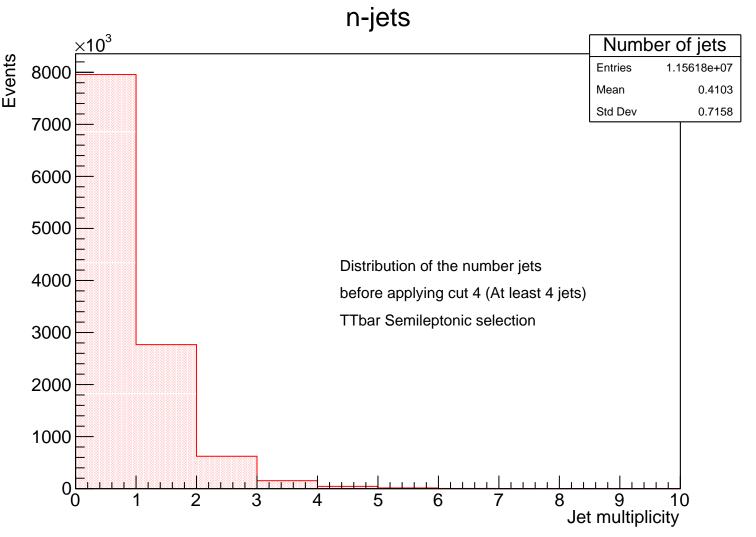
track isolation

Calorimeter Isolation Distribution

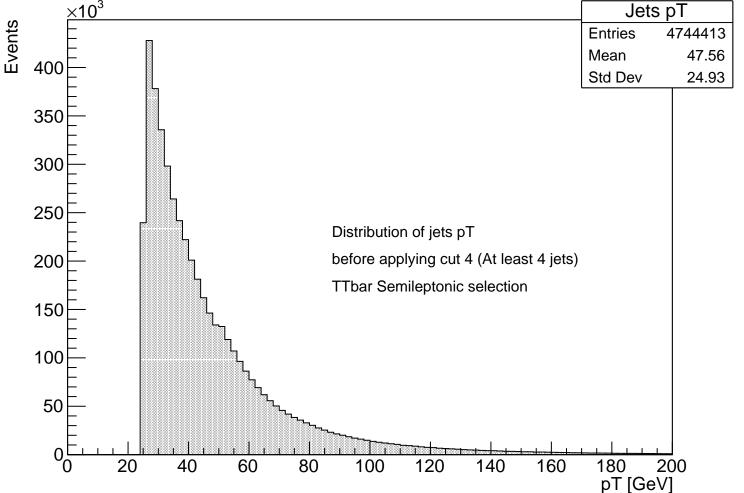


Lepton η Distribution

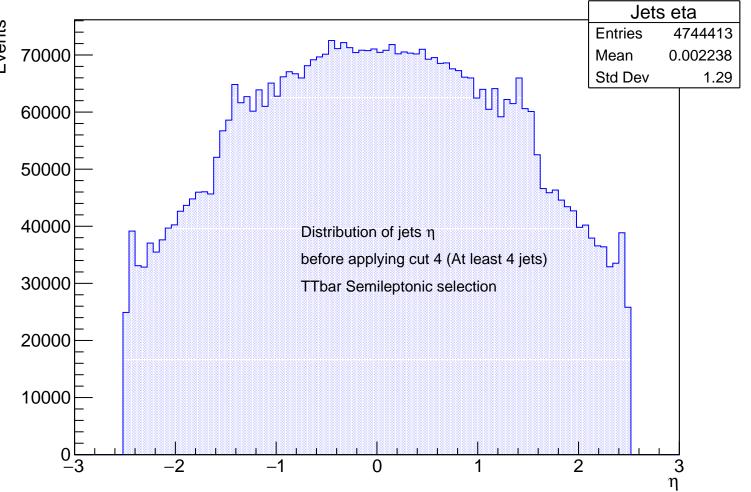




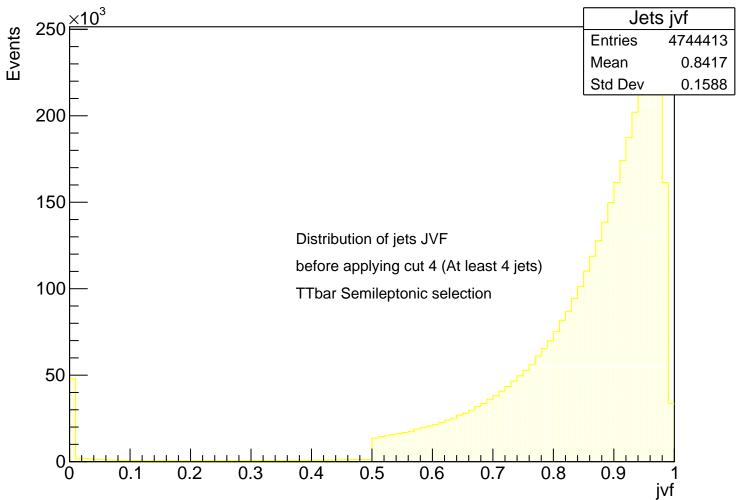
Jets pT Distribution



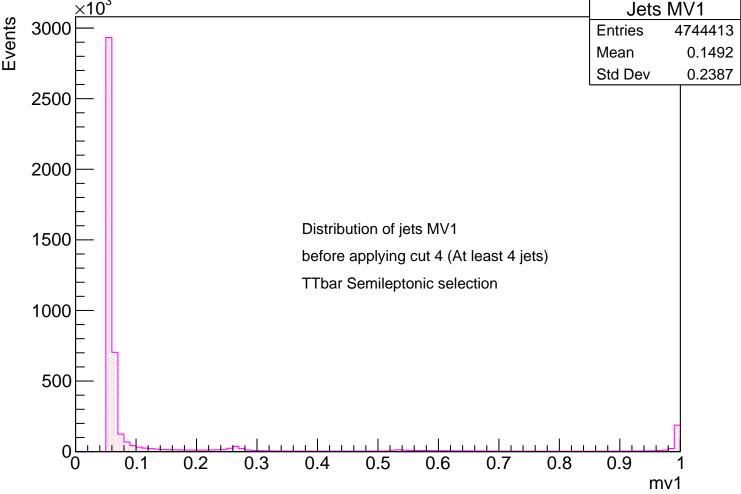
Jets η Distribution



JVF Distribution



Jets MV1 Distribution



bjets 35000 **Entries** 61995 0.6387 Mean Std Dev 0.8105 30000 25000 20000 Distribution of number-bjets before applying cut 4 (At least 4 jets) 15000 TTbar Semileptonic selection 10000 5000

2.5

3

3.5

4.5

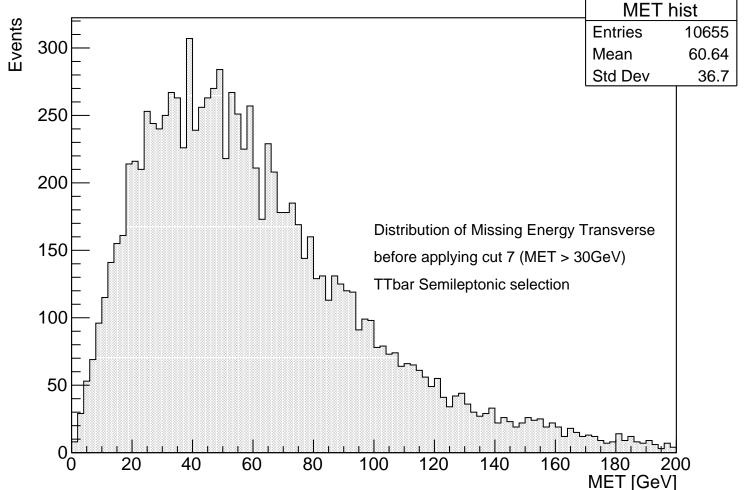
b-jets

1.5

0.5

b-Jets Distribution

MET Distribution



mT(W) Distribution mTW hist Events **Entries** Mean 68.11 Std Dev 35.22 Distribution of Transverse mass mT(W) before applying cut 8 (mT(W)>30GeV) TTbar Semileptonic selection

mT(W) [GeV]