HF jets analysis

28.10.2019 ALICE@IFJ meeting

Sebastian Bysiak

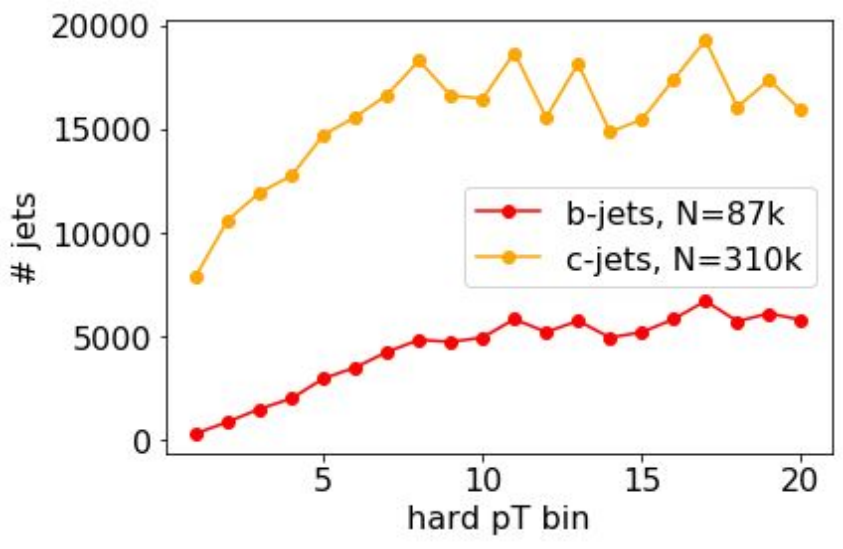
dataset: pp √s = 5.02 TeV

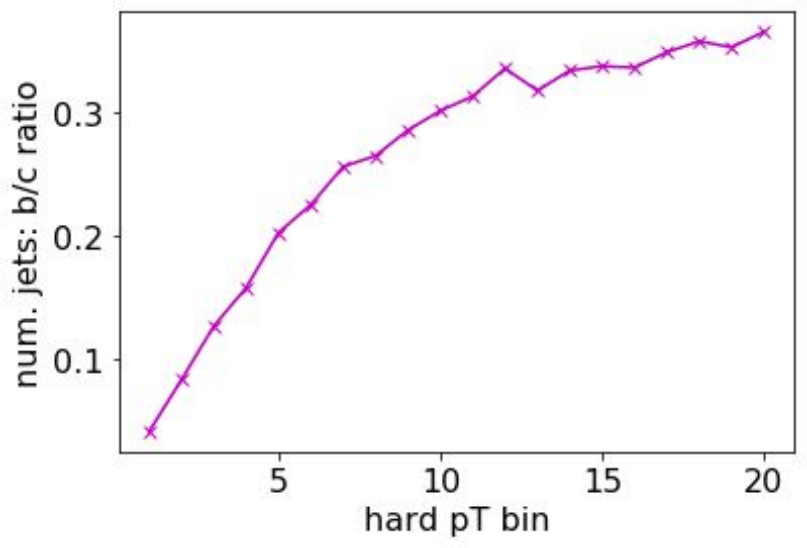
- data: LHC15n, pass4, 180.6M
- MC: **LHC16h3**: *jet-jet Pythia events anchored to LHC15n pass4*
  - 182M events, 174 TB, 33k AliAOD.root
  - loweredges=(5 7 9 12 16 21 28 36 45 57 | 70 85 99 115 132 150 169 190 212 235)
  - higheredges=(7 9 12 16 21 28 36 45 57 70 | 85 99 115 132 150 169 190 212 235 -1)
  - 8 M events per pT hard bin
  - I used 20 AODs from run 244480 per hard pT bin

    (in data 244480 = 12M events = 6.6% of period
    in MC 244480 there are 68-143 AODs per hard pT bin
    => 20AOD/bin ~ 1 /3 - 1/7 of 244480 ~ 1-2% of period ~ 1.8 - 4M)
    - ~1% of available MC statistics (based on num. files)
    - *b* and *c* without downscaling

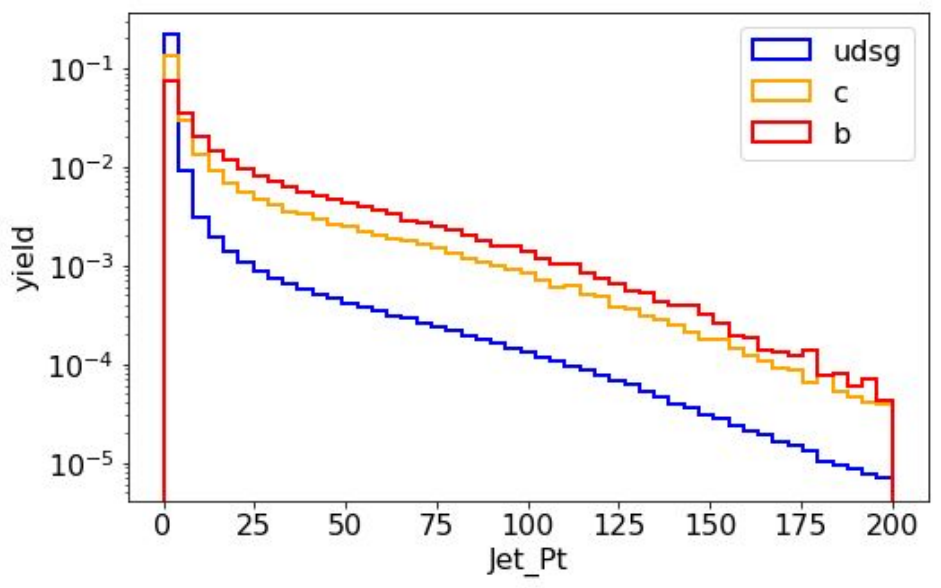
- there is also another MC, anchored to pass2 with *HF injected with electron decays* (LHC16i6a,b)

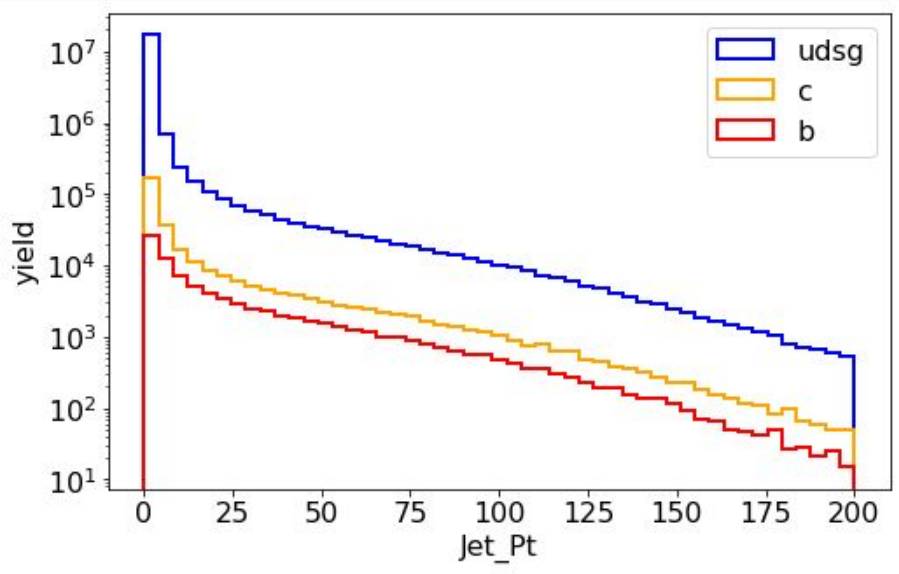
Number of HF jets vs hard pT bin





pT spectrum





udsg downscaled
1 bin = 4 GeV/c