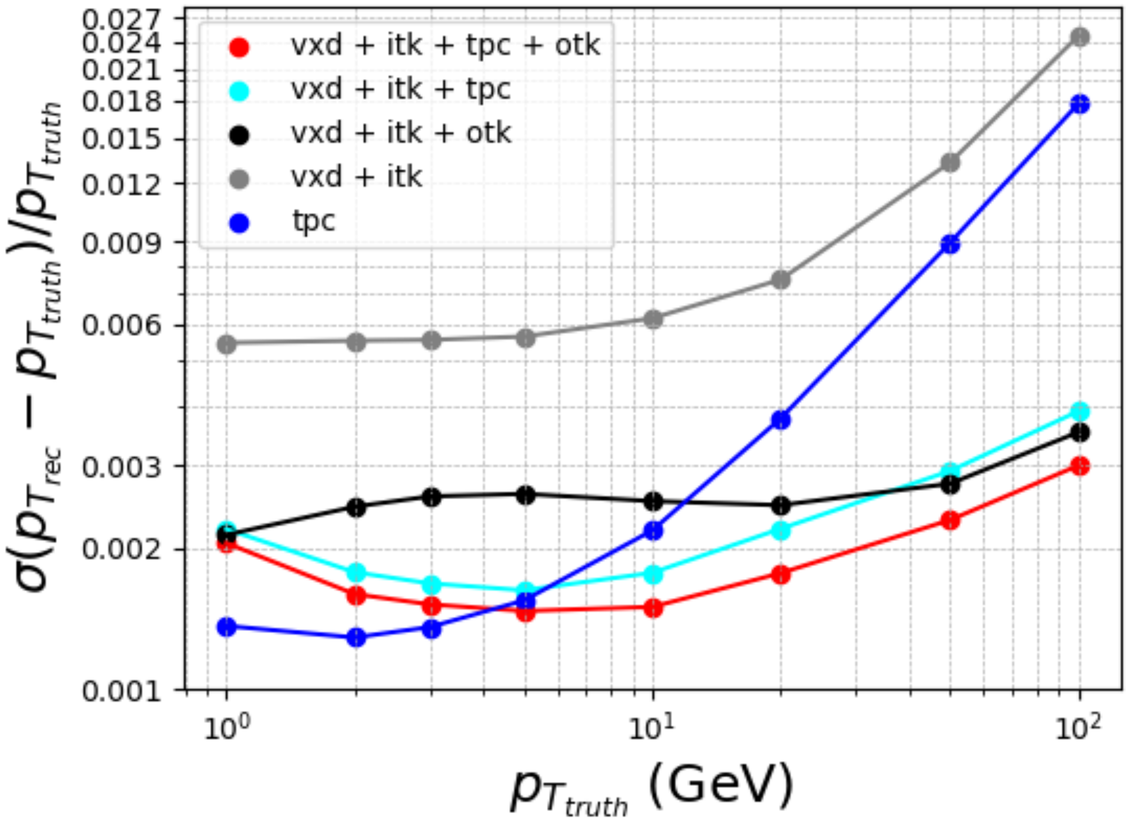
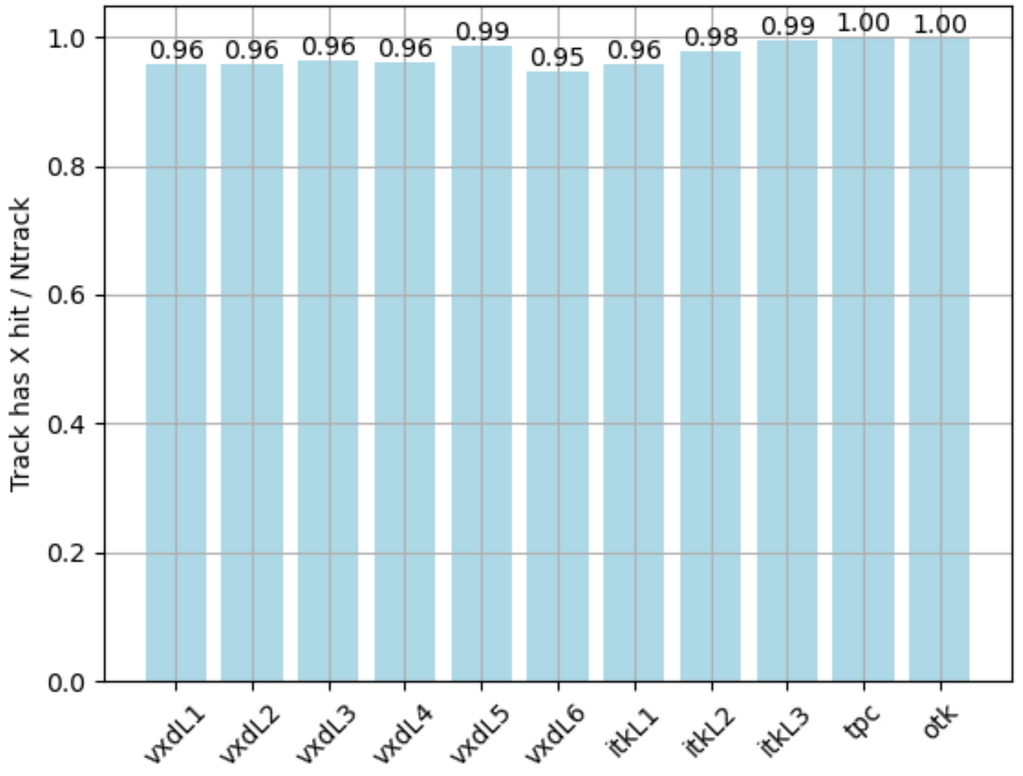
Trk

C.Zhang/17Jan2025

Trk Resolution @ 12.1.1

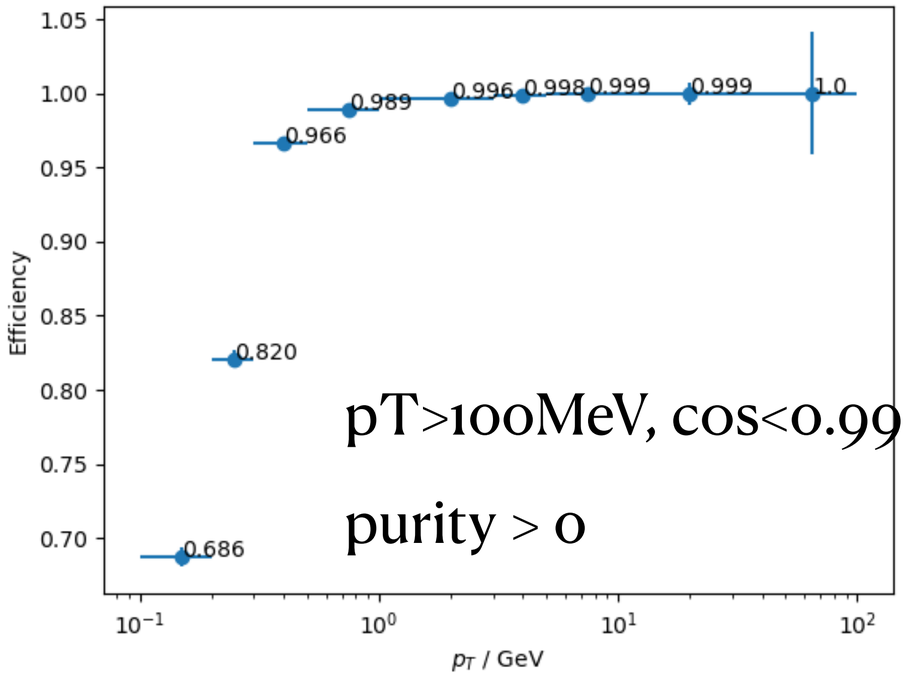


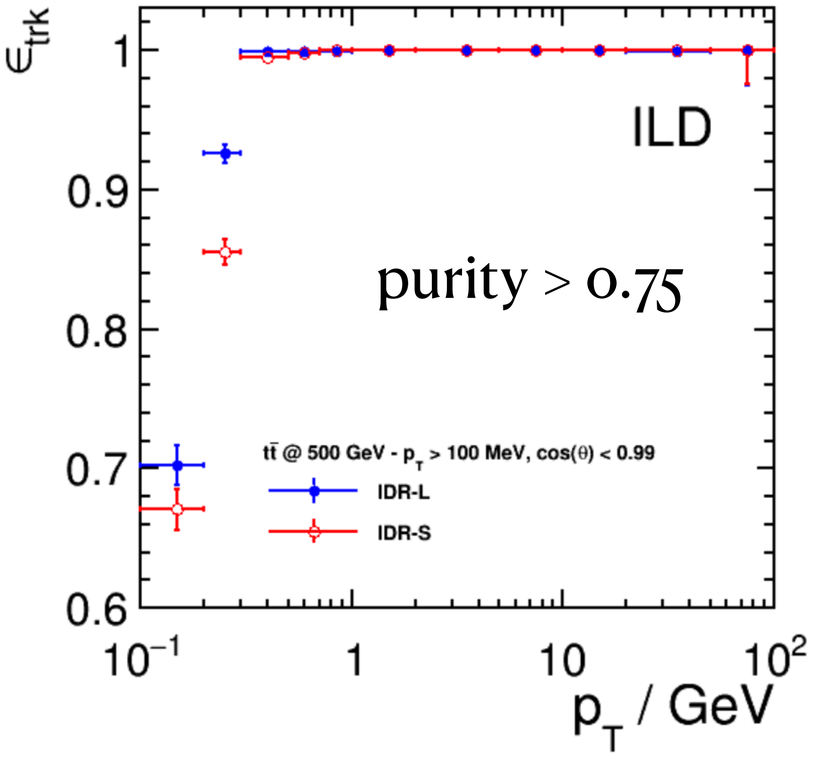


- CompleteTrack @ 1 GeV
- Similar performance for other momenta point

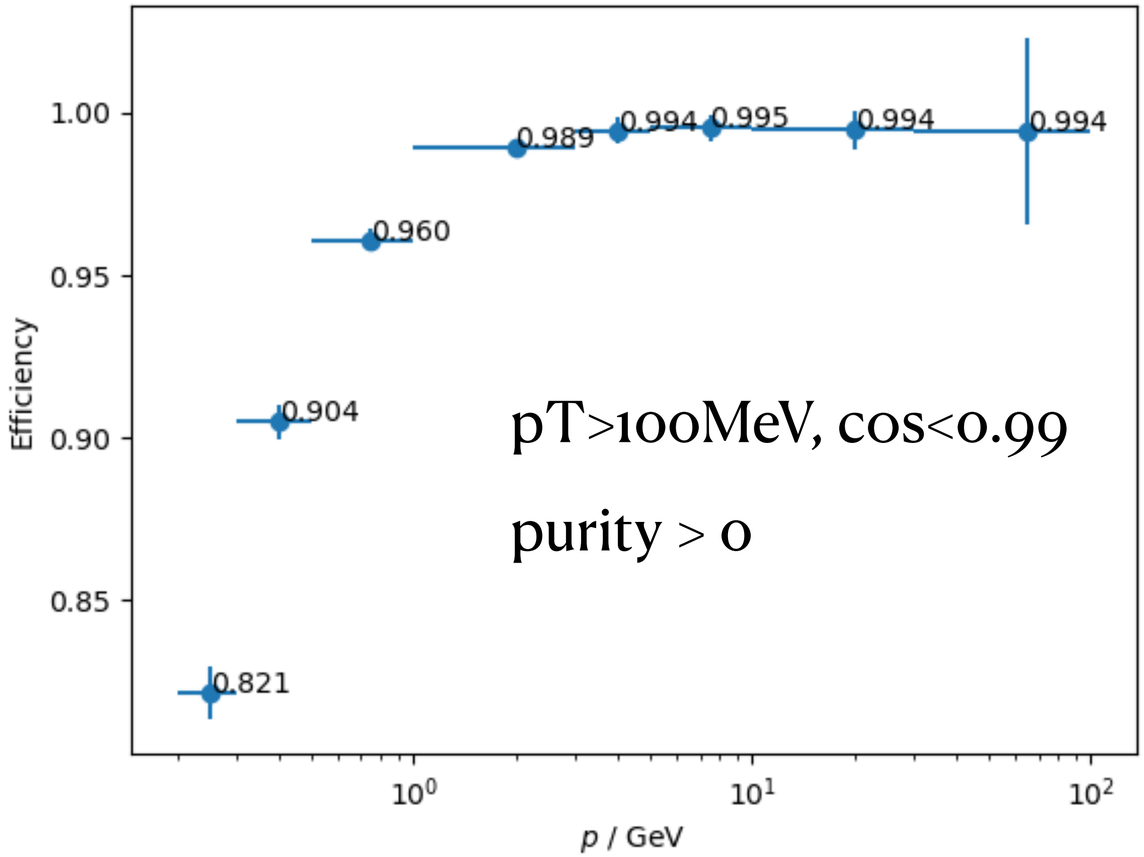
Trk Efficiency

- Samples with 4 or more jets not available, **E124_nnHbb** used for now
- Treat Ntrk>1 as 1 for multiple-tracks
- Purity = $\frac{\text{TRK Hits}}{\text{MC Hits}}$
- Denominator: charged stable MC particle, exclude
    1. pT < 100 MeV
    2. cos(\theta) > 0.99
    3. starting-point > 10 cm
    4. decayed in tracker
- Numerator: reconstructed tracks with purity > 0, 75 %
- NO BKG



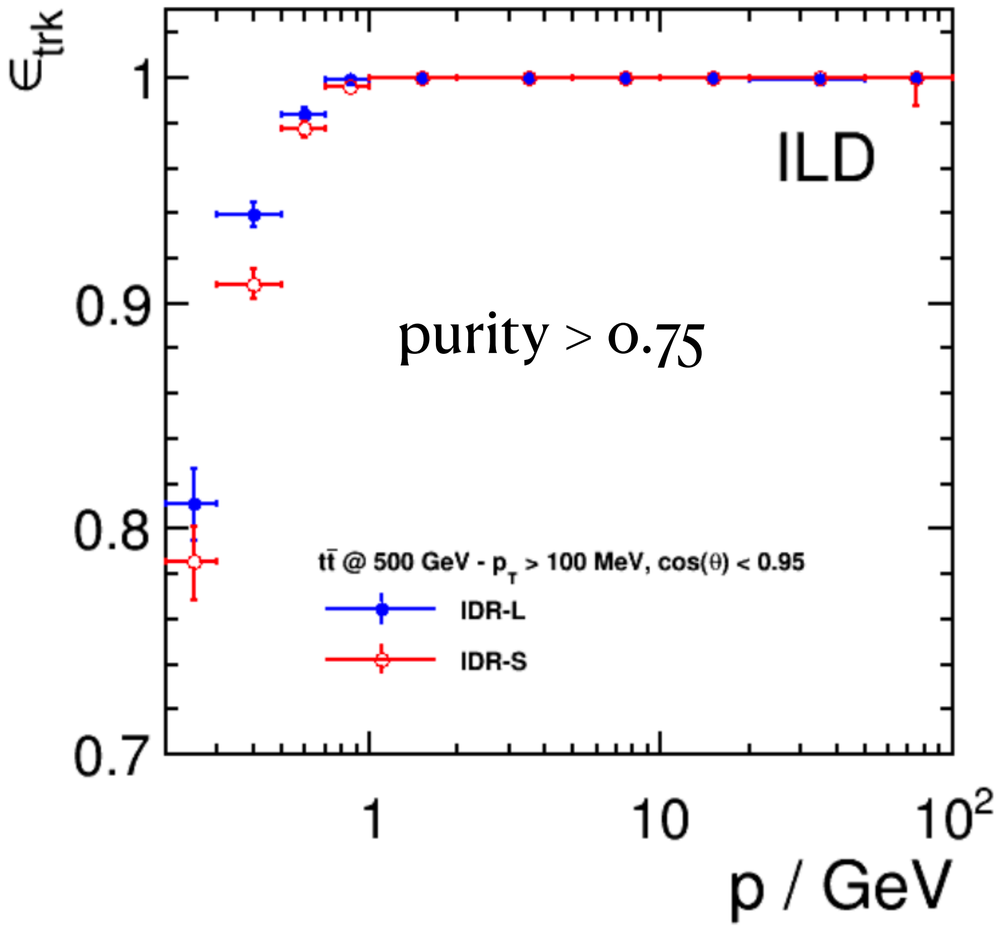


Trk Efficiency

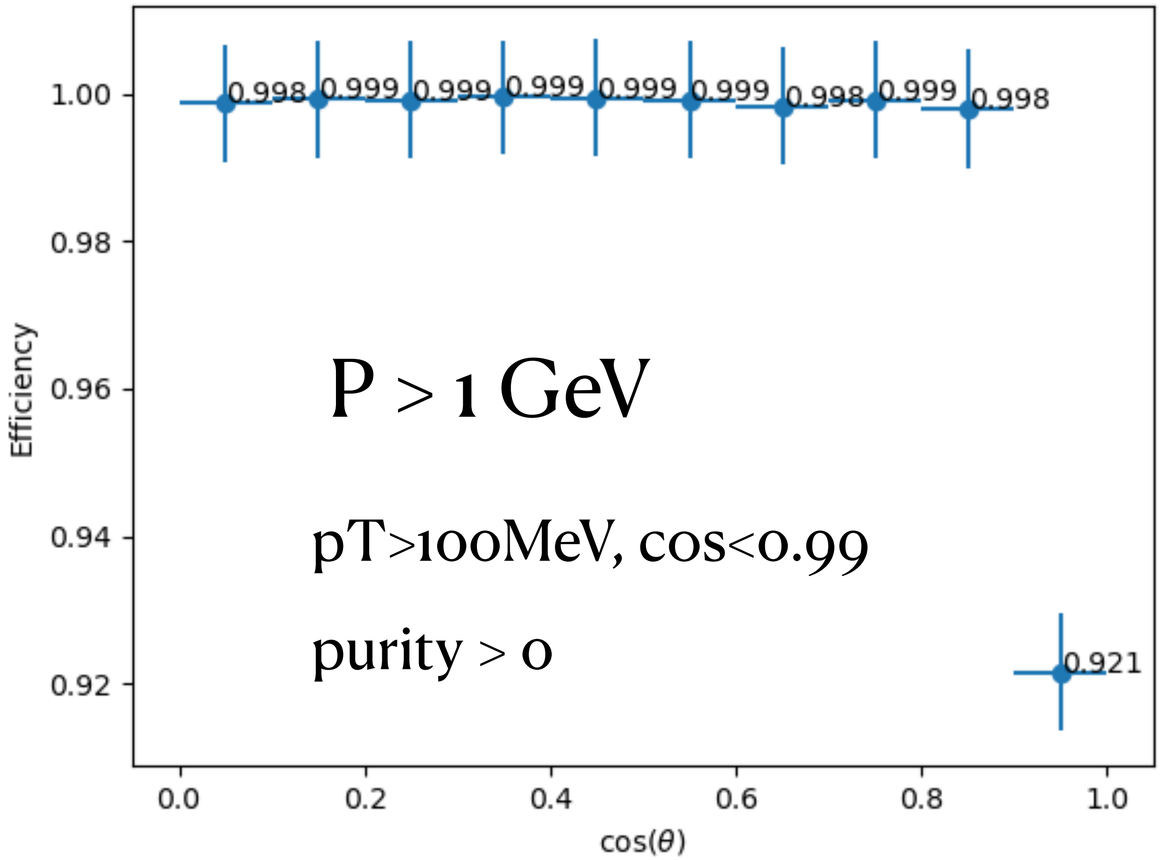


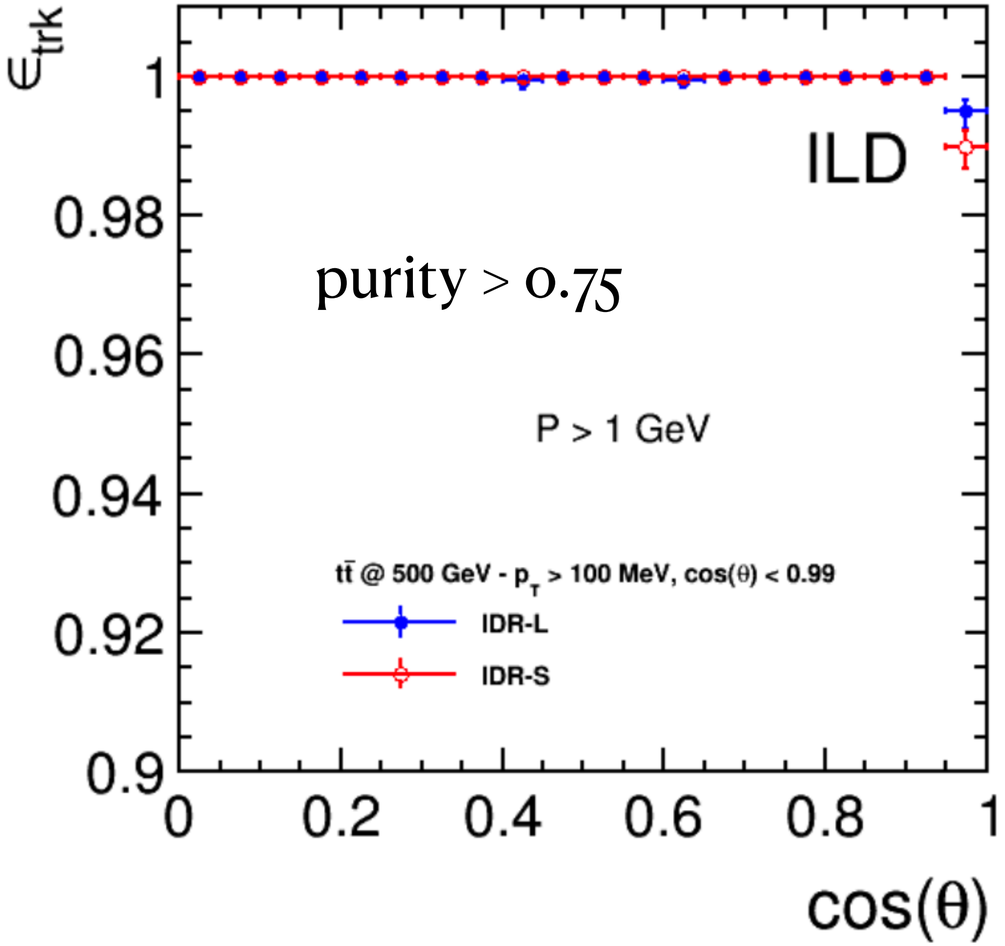
pT>100MeV, cos<0.99

purity > 0

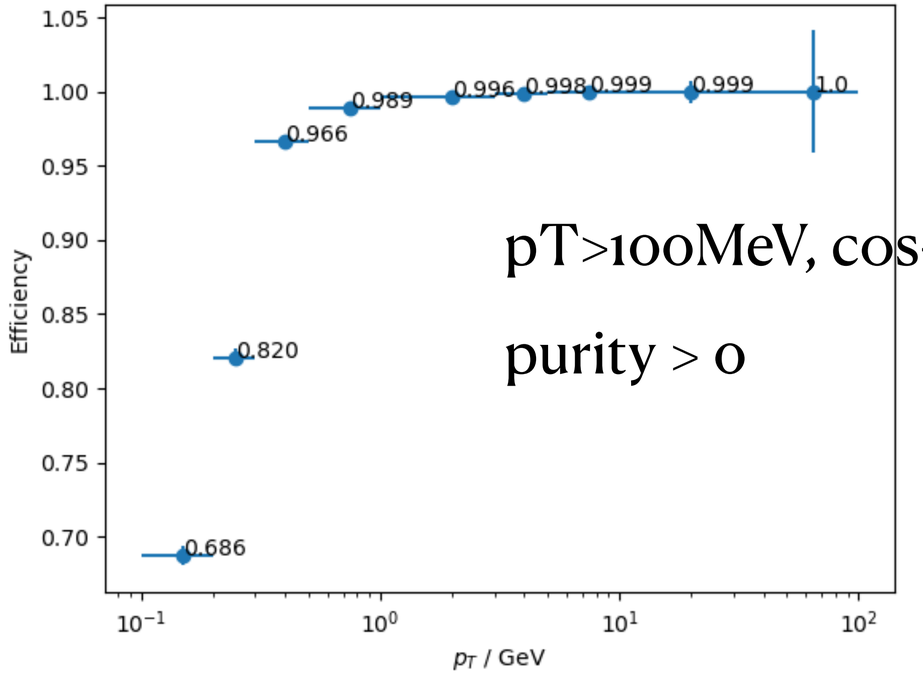


Trk Efficiency



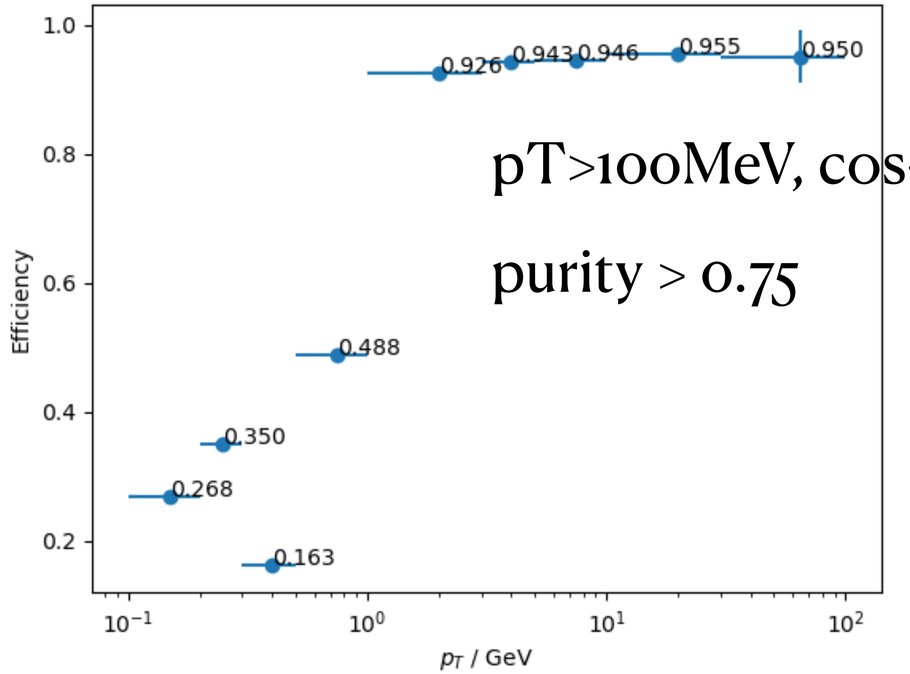


Trk Efficiency



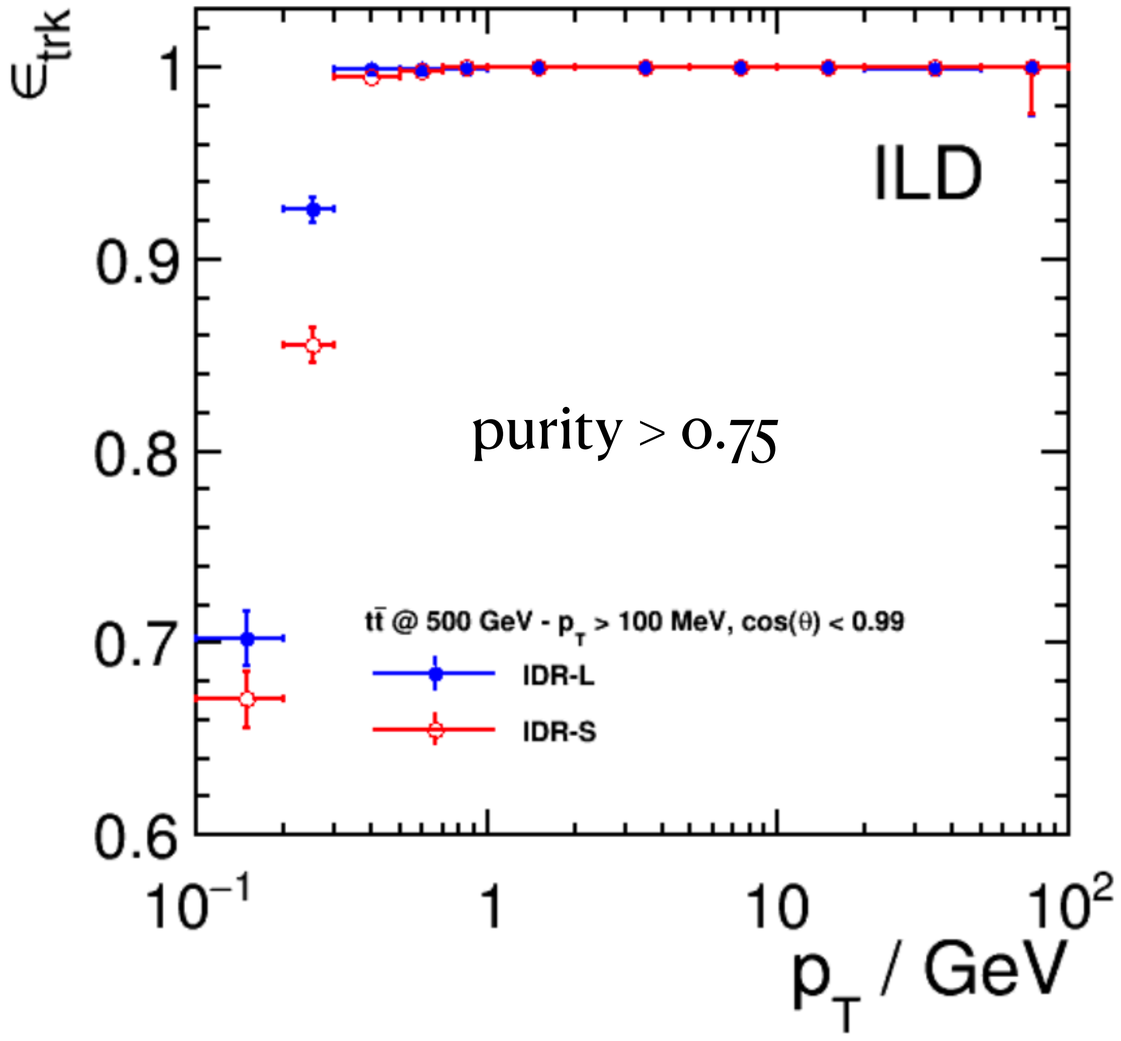
pT>100MeV, cos<0.99

purity > 0

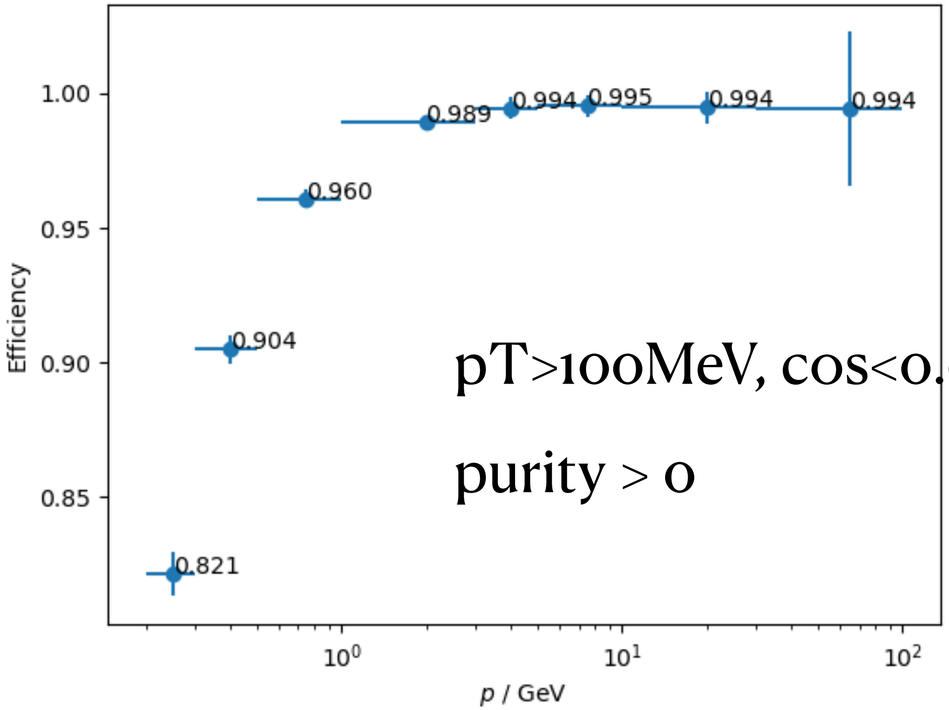


pT>100MeV, cos<0.99

purity > 0.75

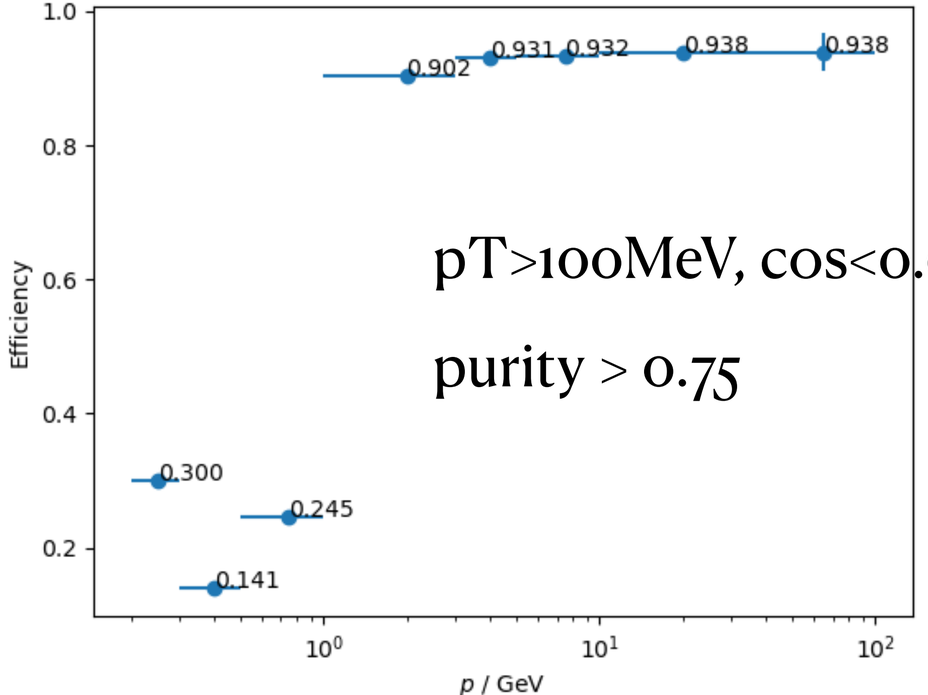


Trk Efficiency



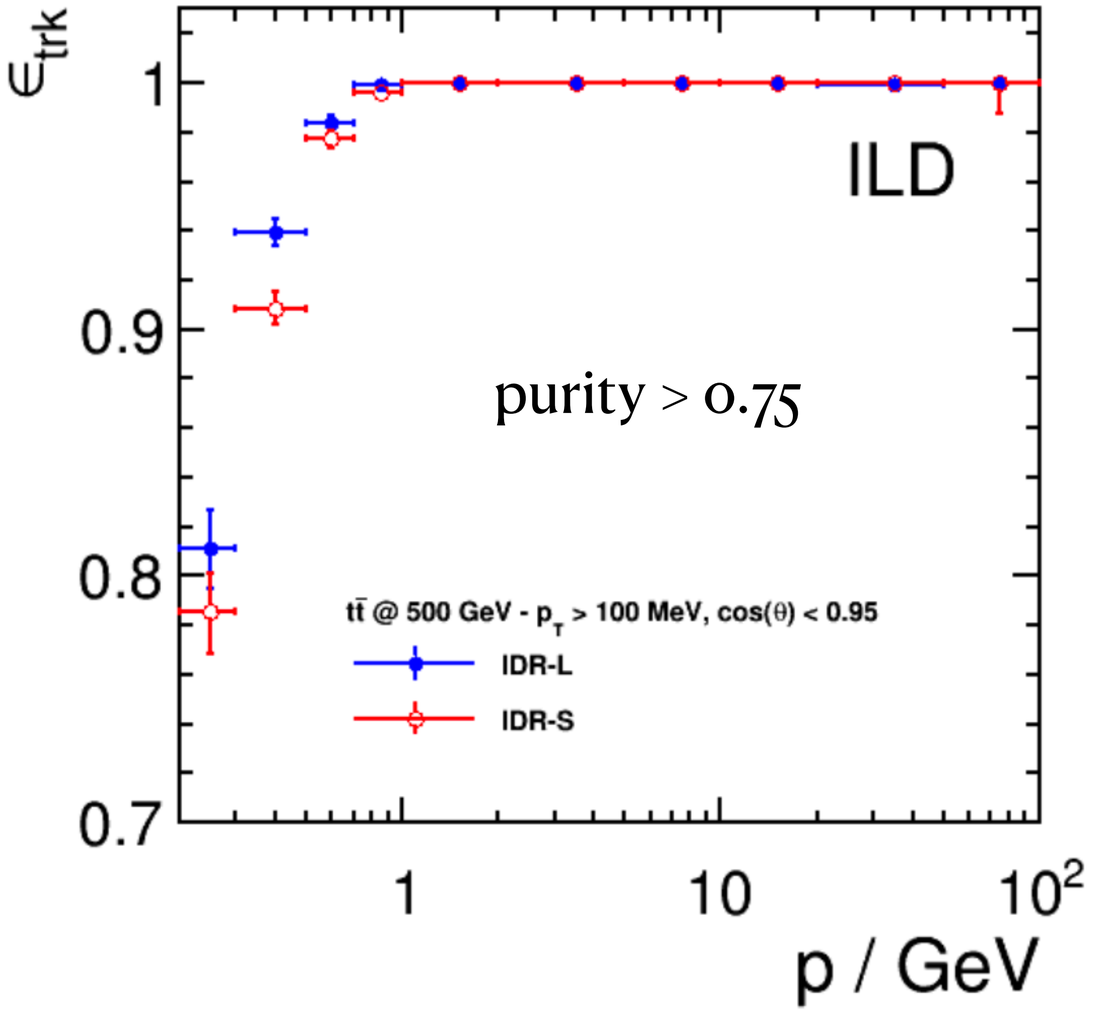
pT>100MeV, cos<0.99

purity > 0

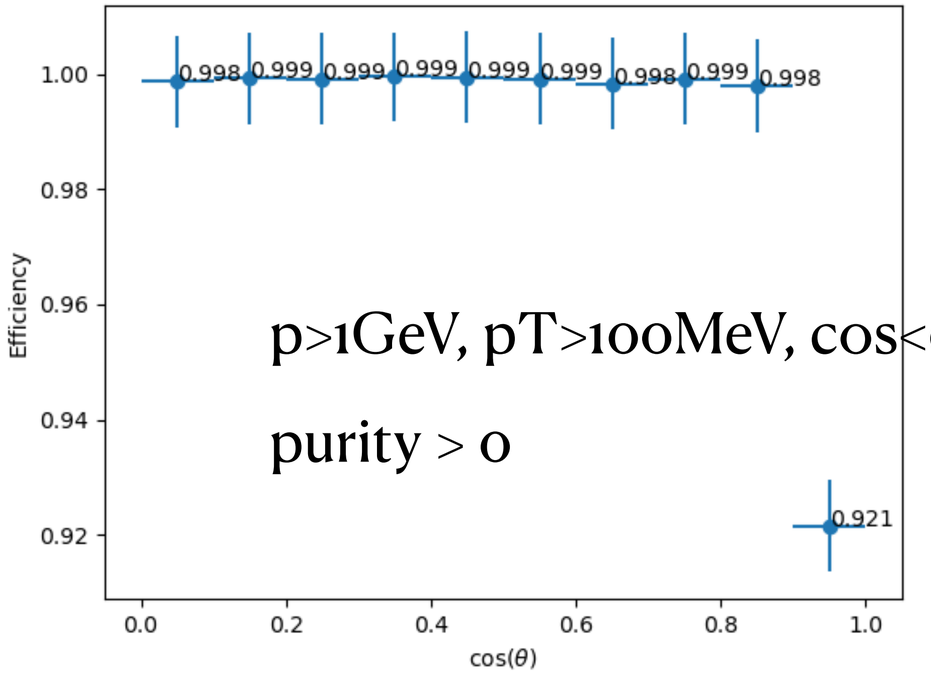


pT>100MeV, cos<0.99

purity > 0.75

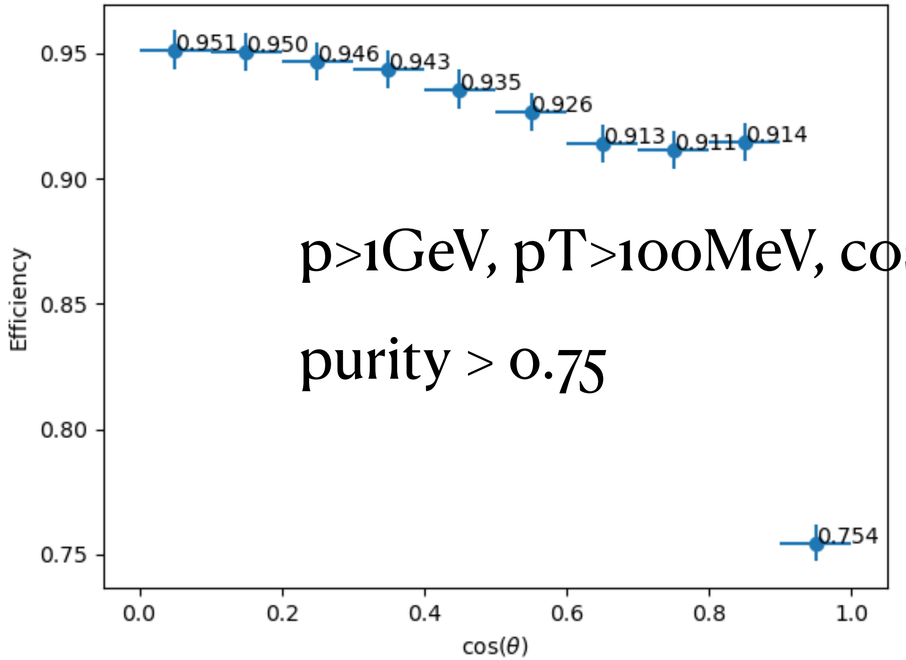


Trk Efficiency



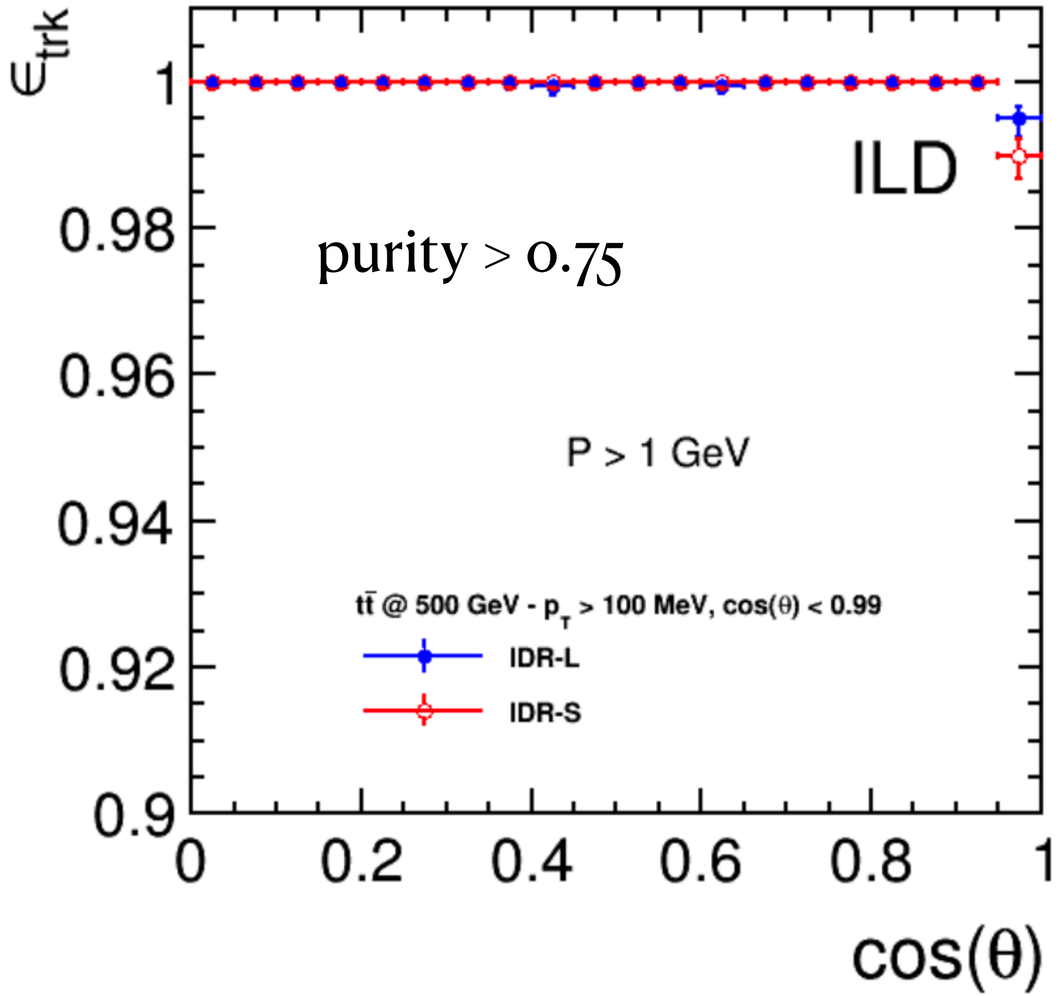
p>1GeV, pT>100MeV, cos<0.99

purity > 0



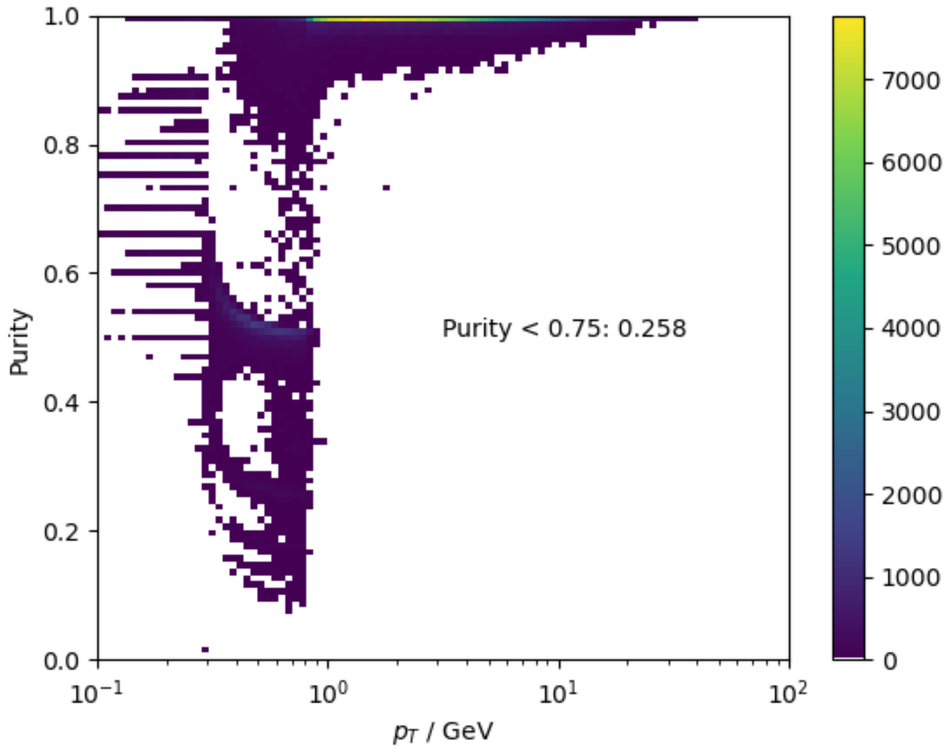
p>1GeV, pT>100MeV, cos<0.99

purity > 0.75



Trk Efficiency

- E124_nnHbb, Gen_pT vs. Purity



- By the way, define Purity=0 as fake, then fake ratio = 0.
- No data no plot, Ready for BKG