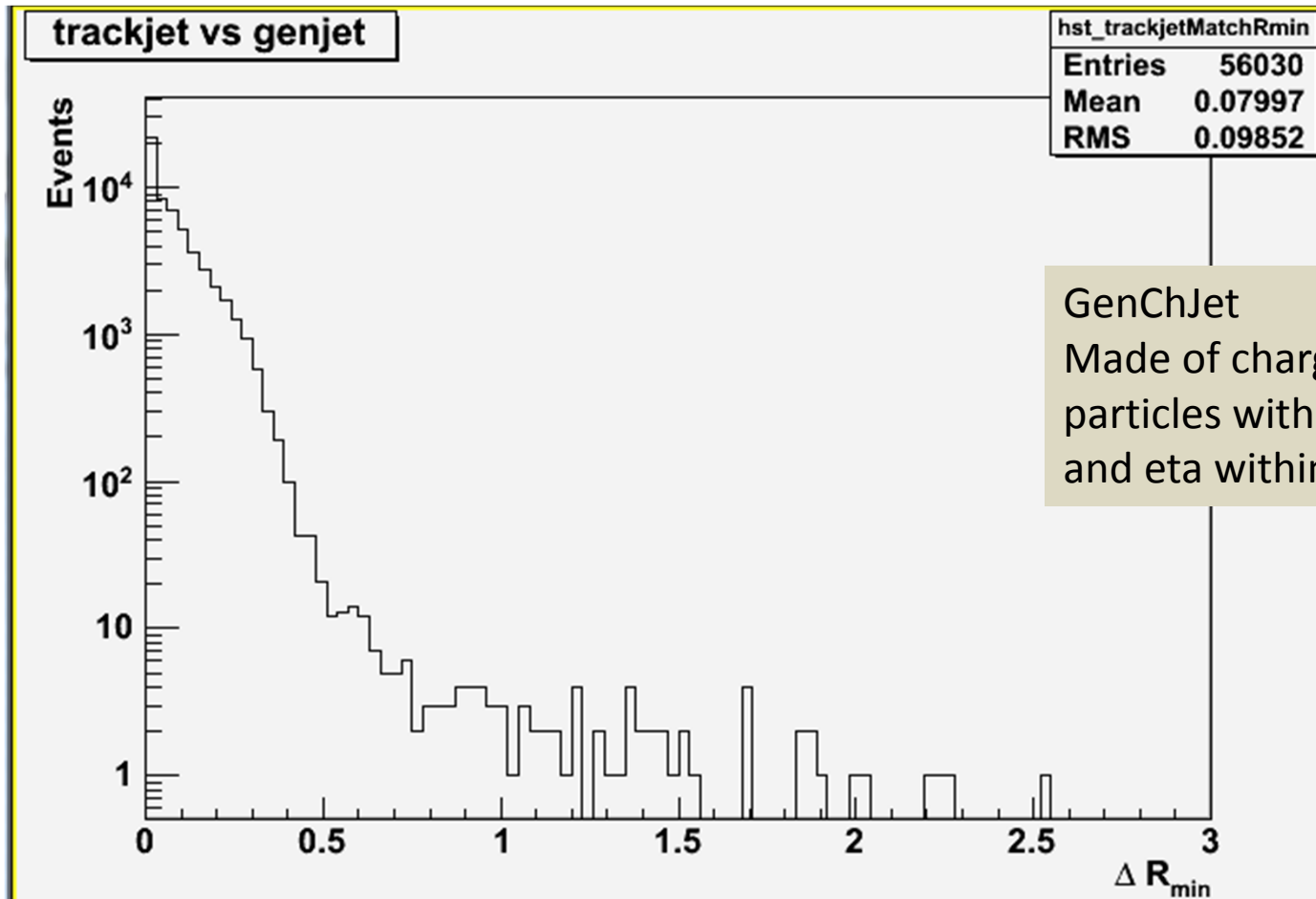
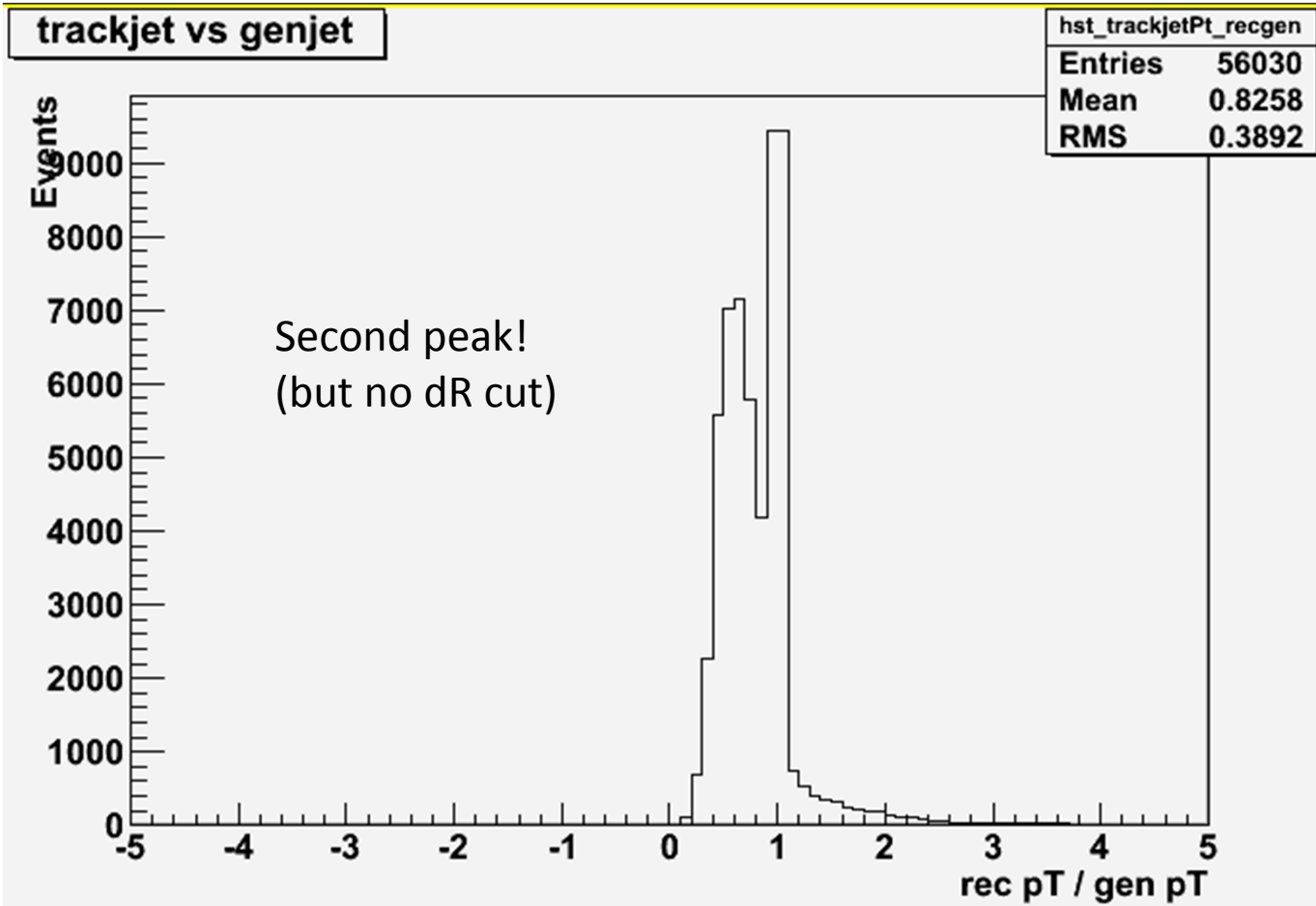


GenChJet Matching: DeltaR

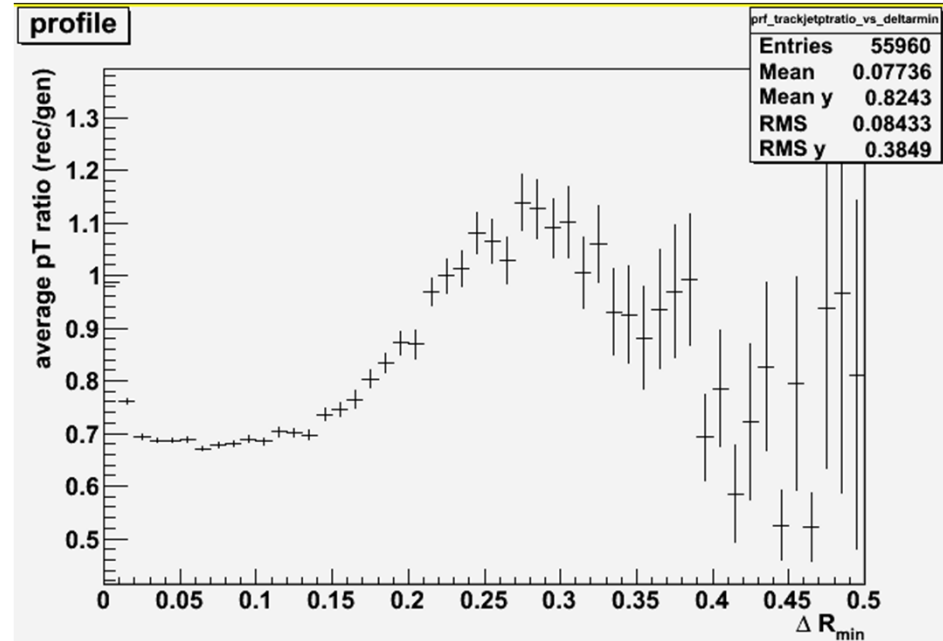
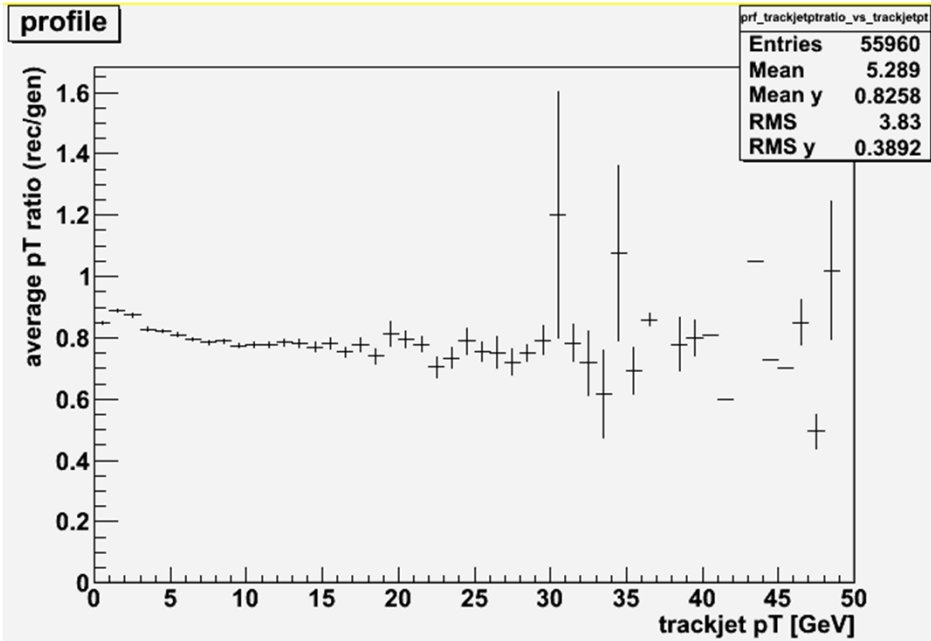


- full event selection and V0 selection applied (histo filled once for event with at least 1 good rec V0 found)
- GenChJet matching in eta/phi, no cut on DeltaR yet
- Many closest matched GenChJets are still far away ($dR > 0.1$) !

TrackJet/GenChJet pT Ratio



TrackJet/GenChJet

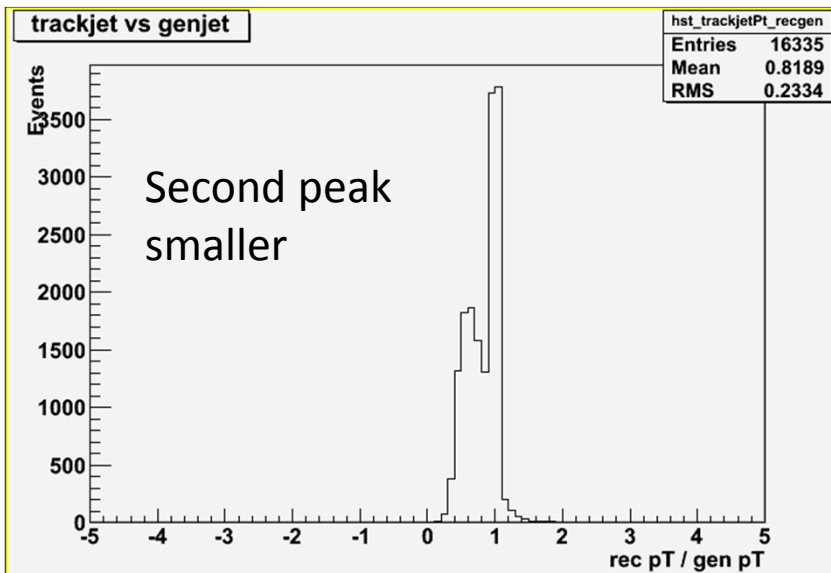


- Avg pt-ratio dependency on trakjet pT and on DeltaR
- Notice that the avg pt-ratio vs dR (right plot) is ~ 1 for the first bin ($dR < 0.01$), then it goes down

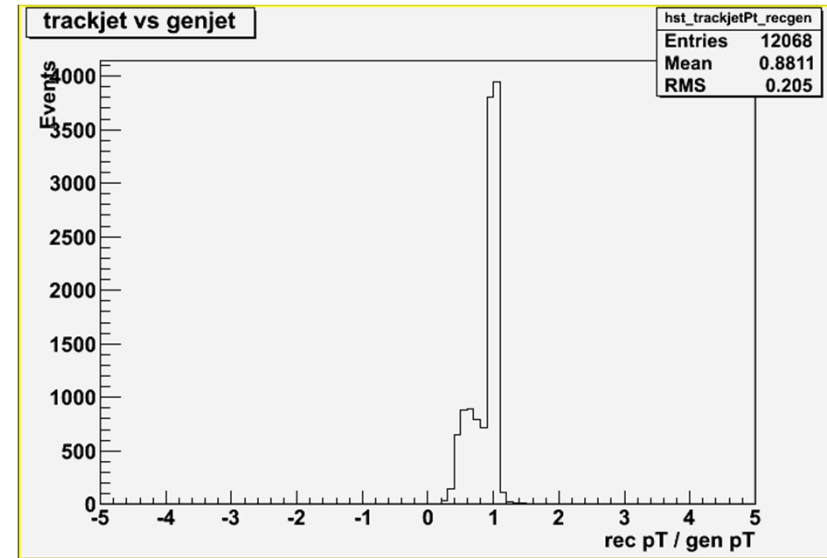
DeltaR cut

On slides before, no cut on the dR to see how close is GenJet wrt to reco trackjet. Many GenJets which are closest in eta/phi are still very far away from the reconstructed trackjet .

Apply $dR < 0.1$ cut:

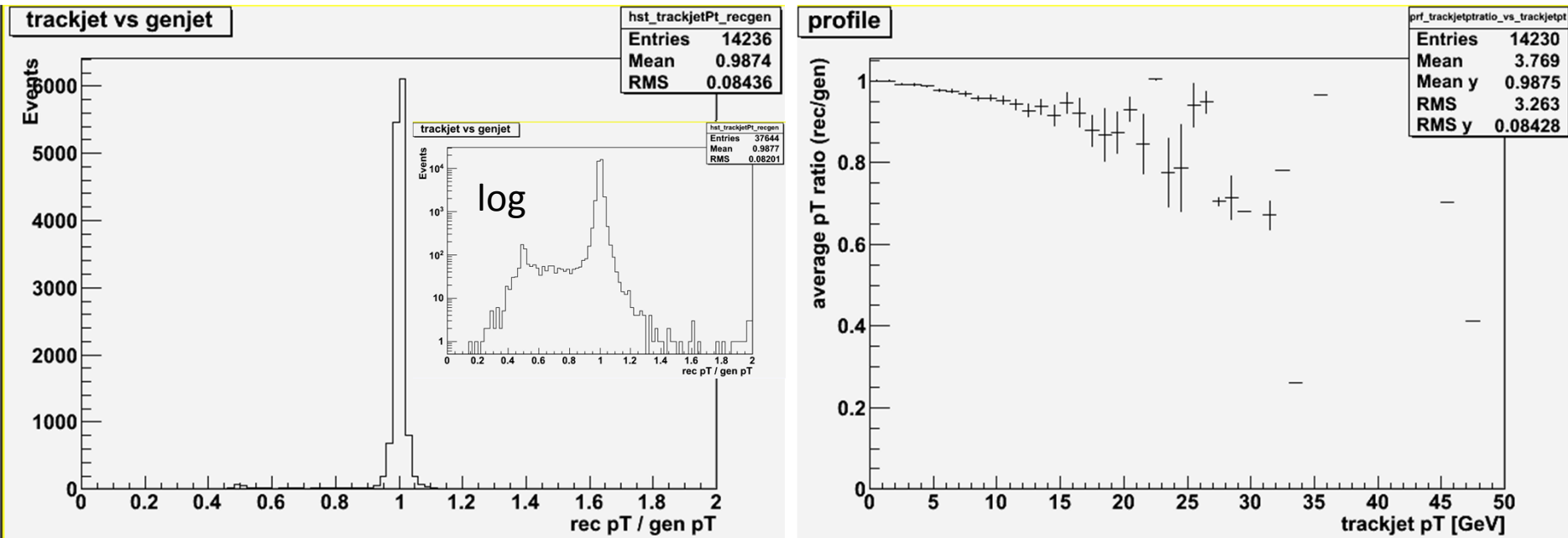


Apply $dR < 0.05$ cut:



DeltaR cut < 0.01

Apply $dR < 0.01$ cut:



Trackjet pt dependence

Question: what dR cut should we apply and how do we justify the cut? And, if we apply the cut, what does it mean for the fraction of reco trackjets that are NOT matched with GenJet (because $dR > \text{cut}$)?