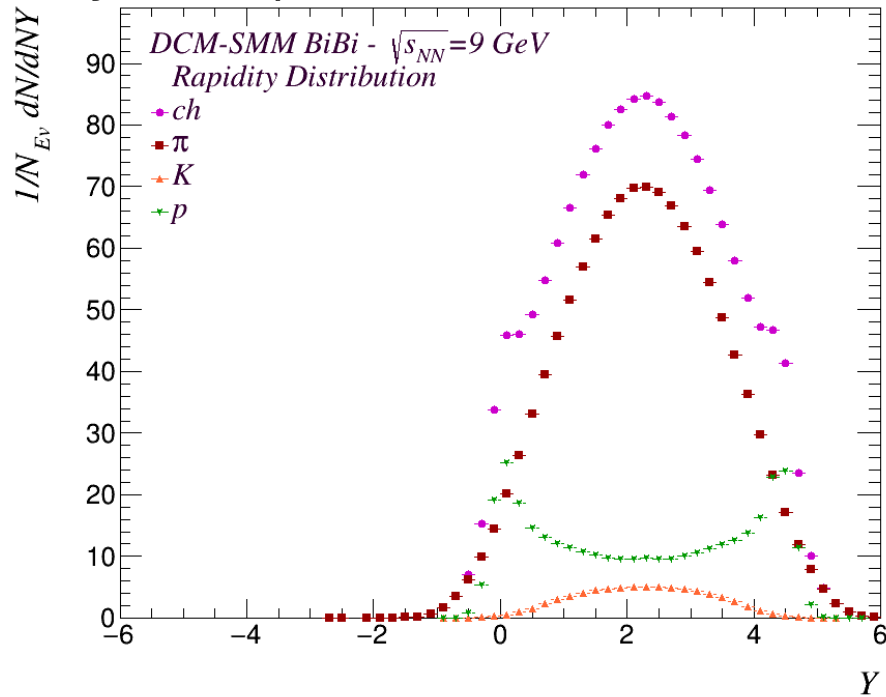


# DCM-SMM - BiBi collisions at 9GeV

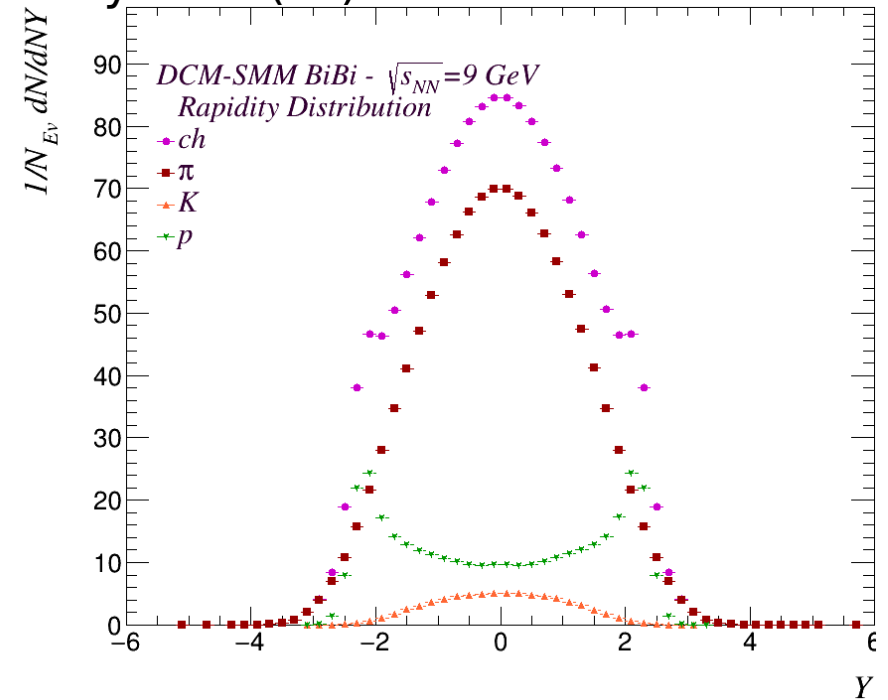
Mike Medina, I. Maldonado

# Rapidity distribution

Pz measured with respect lab system (pzlab)



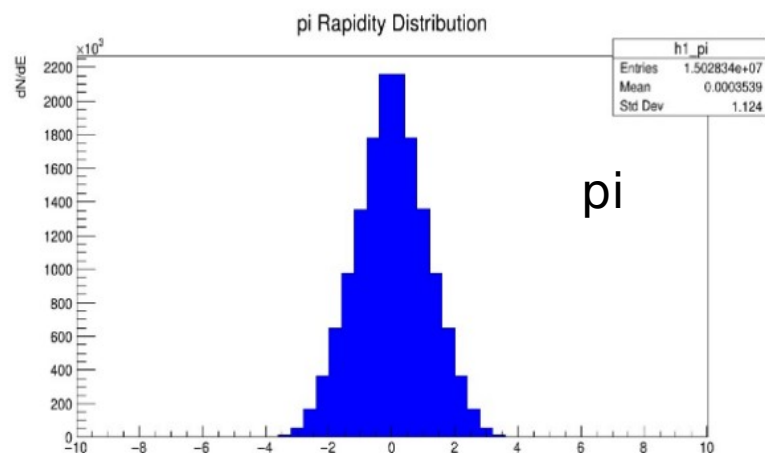
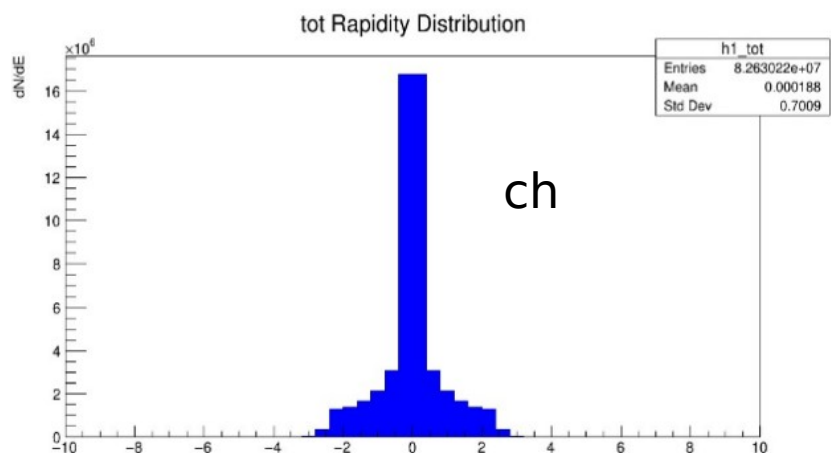
Pz measured with respect CM system (Pz)



Pure MC results,  $\sim 92500$  events readed files \*.r12

# Rapidity distribution - preliminary results

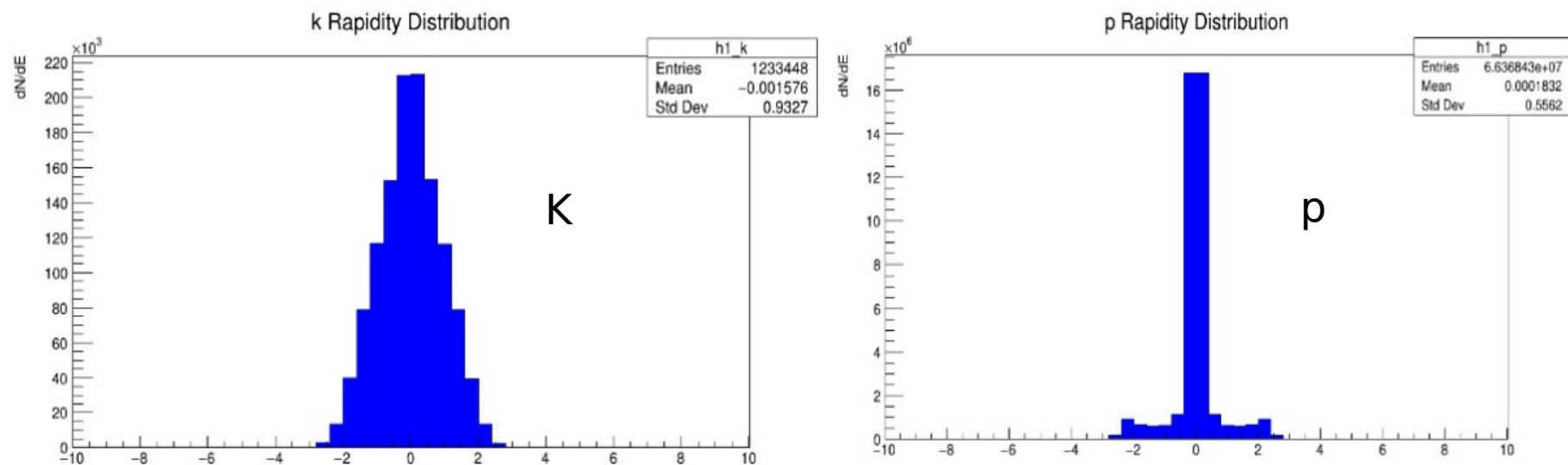
Pz measured with respect CM system (Pz), require to modify the class MpdcMgenerator.cxx to change Pzlab to Pz.



MCTracks results, ~92500 events readed files mpddst.root

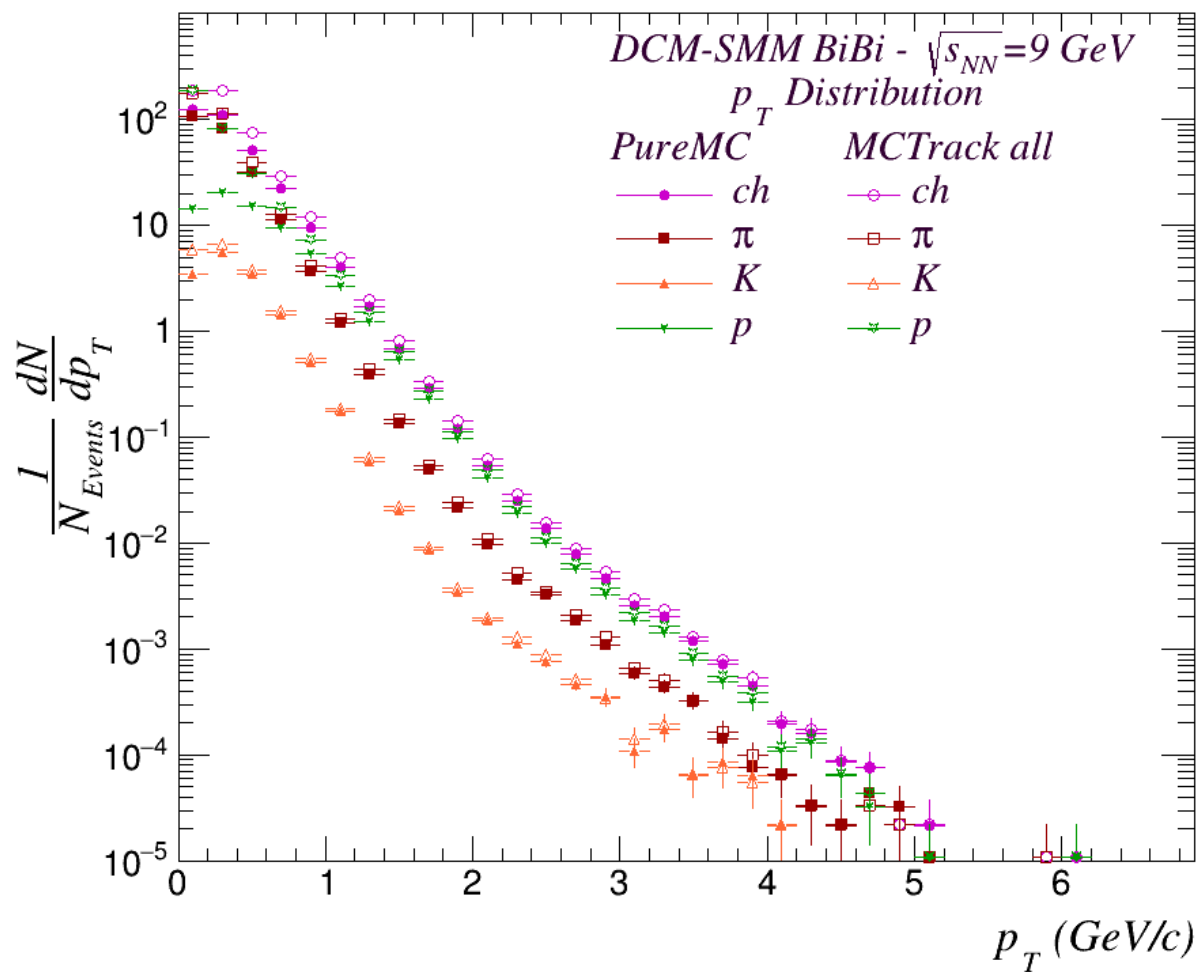
# Rapidity distribution - preliminary results

Pz measured with respect CM system (Pz), require to modify the class MpdDCMgenerator.cxx to change Pzlab to Pz.



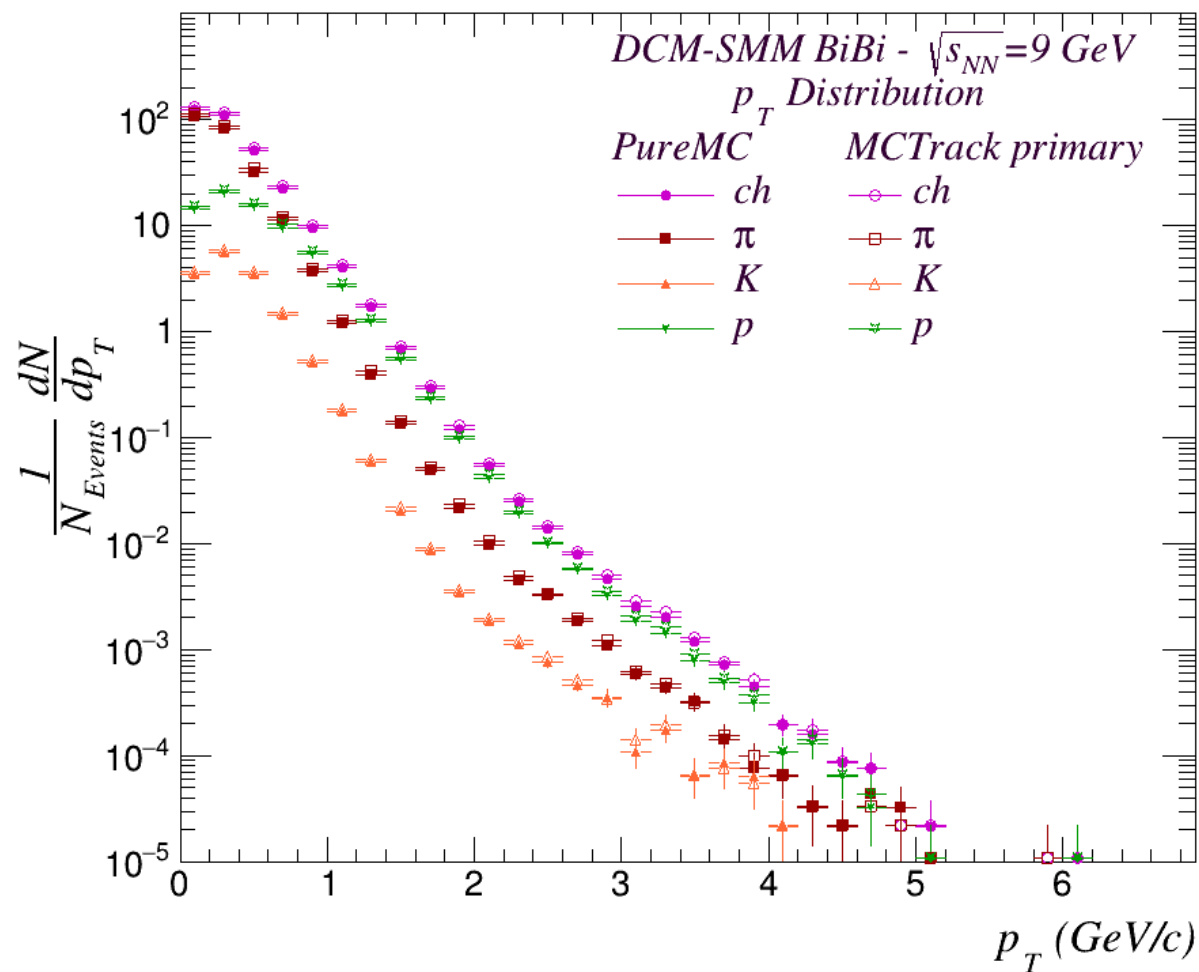
MCTracks results, readed files mpddst.root

# $P_T$ distribution - Comparison between pure MC and MCTrack



MCTrack distribution is higher than pure MC because contribution of secondaries

# $P_T$ distribution - Comparison between pure MC and primary MCTrack

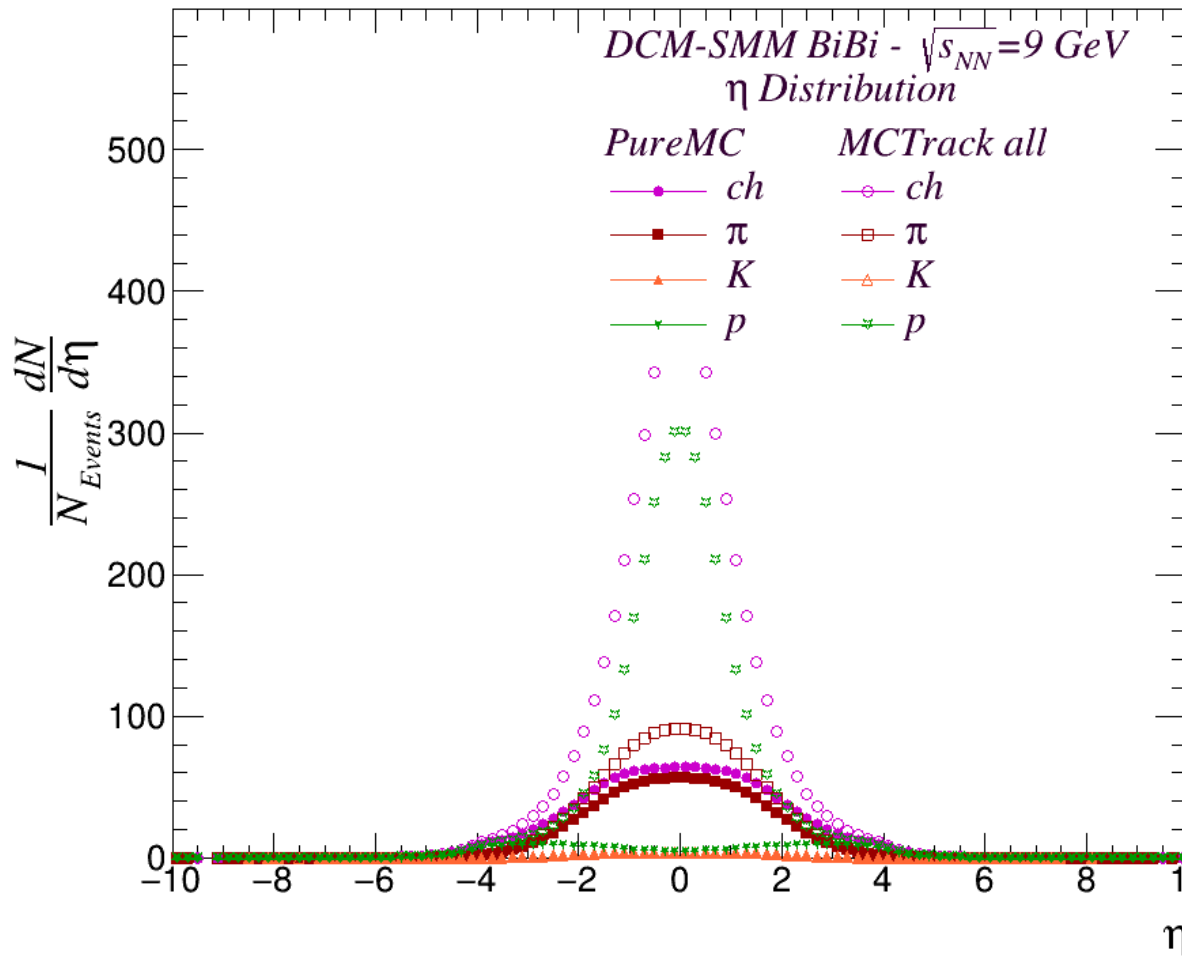


MCTrack distribution still remains higher.

It looks a problem with normalization to the number of events, aprox  $\sim 6\%$  more

however requires to be checked

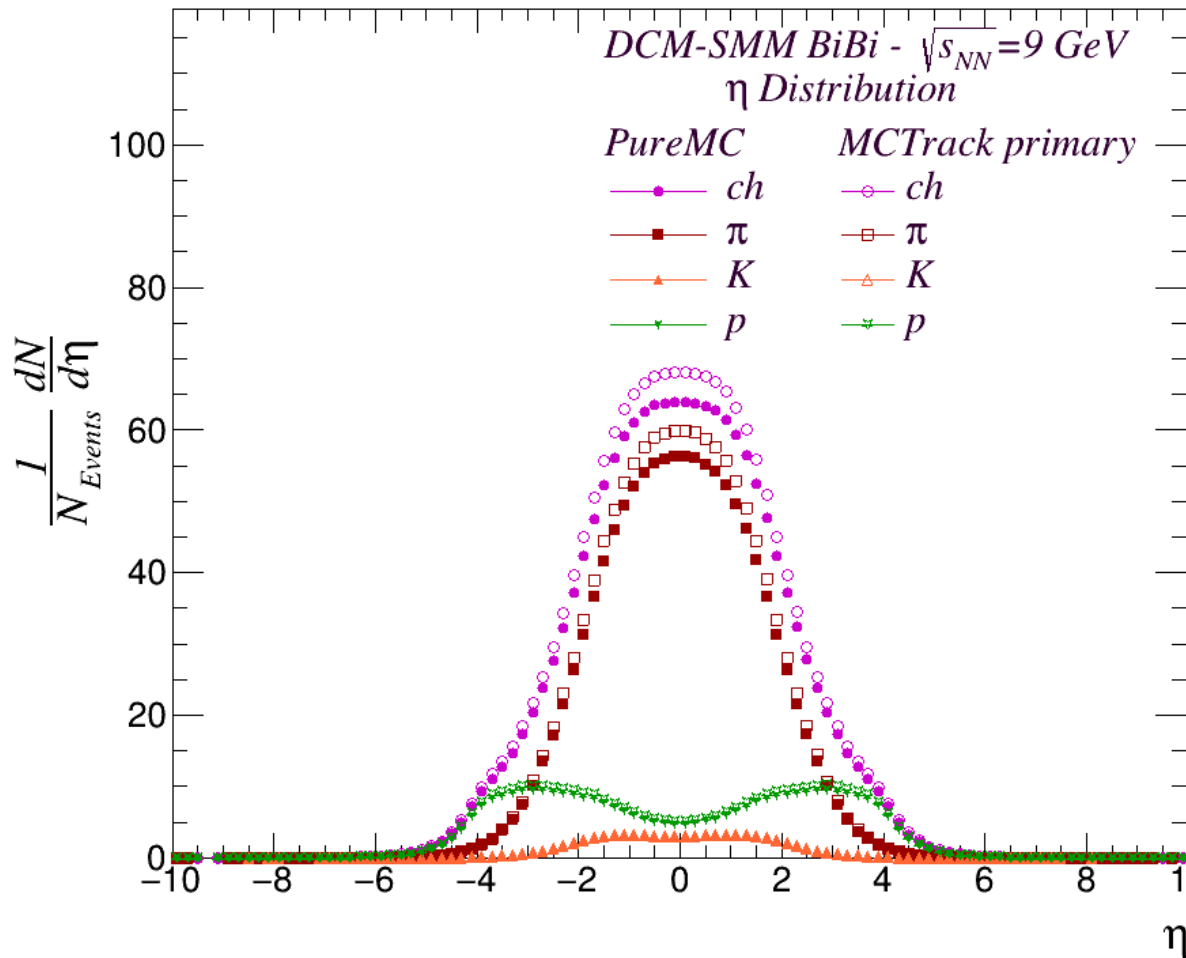
# $\eta$ distribution - Comparison between pure MC and MCTrack



MCTrack distribution is higher than pure MC because of contribution of secondaries.

Similar results for rapidity distribution

# $\eta$ distribution - Comparison between pure MC and primary MCTrack



The difference is more evident in  $\eta$  distribution.

Increasing the number of events by approx  $\sim 6\%$  looks the same

This should be checked:

Perhaps the way in which Spectators, remanent and cascade particles are transported!!