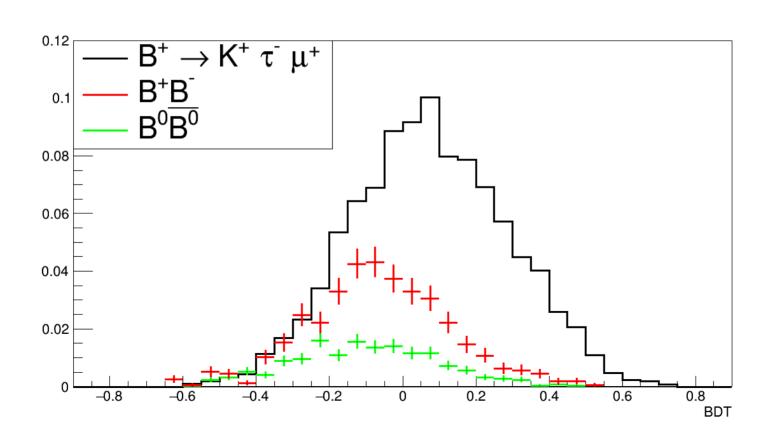
## update

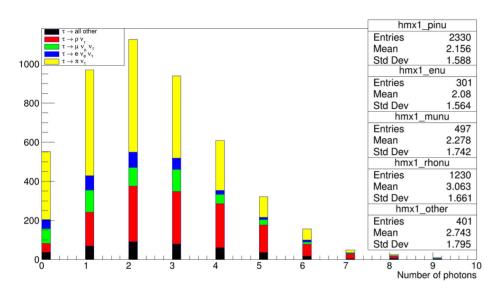
Additional plots
Application on the different signal and background samples

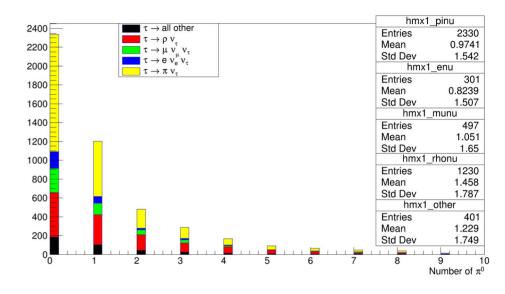
20/11/2024

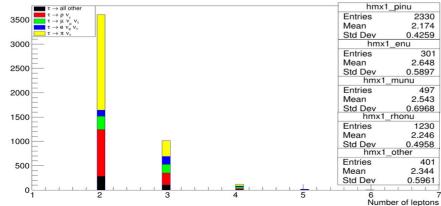
# Normalized signal and bg



### Additional plots

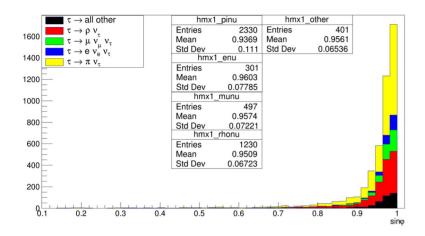


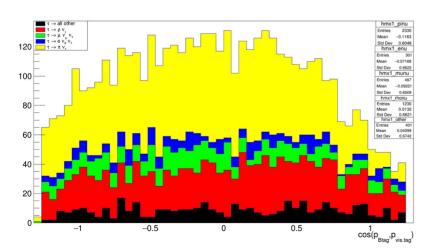


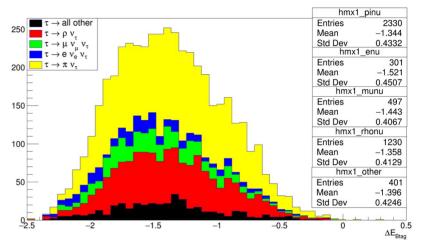


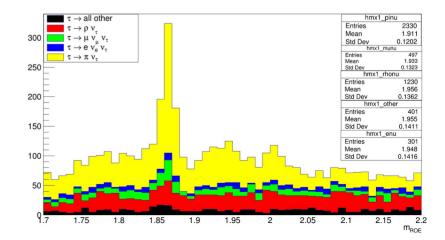
# Back up

#### Basic distributions

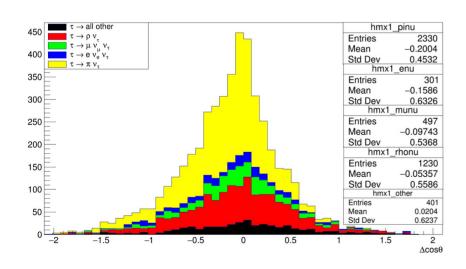


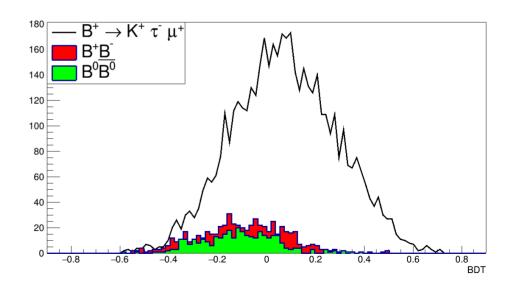




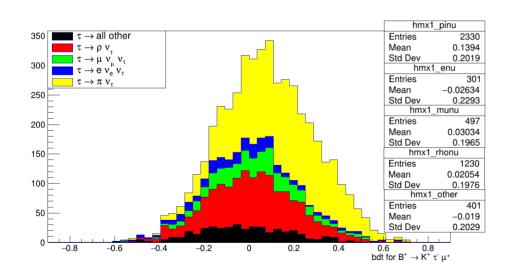


#### Basic distributions cont.

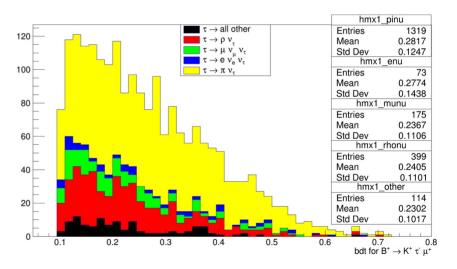




# BDT distribution for signal



#### Bdt>0.10



#### Particle selection

```
# cuts on particles ID and IP
e_cut = 'eIDBelle > 0.6 and muIDBelle < 0.98 and atcPIDBelle(3,0) < 0.98 and d0 < 1 and abs(z0) < 4 and p > 0.05'
mu_cut = 'muIDBelle > 0.6 and eIDBelle < 0.98 and atcPIDBelle(3,1) < 0.98 and d0 < 1 and abs(z0) < 4 and p > 0.05'
pi_cut = 'atcPIDBelle(3,2) < 0.6 and d0 < 1 and abs(z0) < 4 and p > 0.05 and muIDBelle < 0.98 and eIDBelle < 0.98'
K_cut = 'atcPIDBelle(3,2) > 0.6 and muIDBelle < 0.98 and eIDBelle < 0.98 and d0 < 1 and abs(z0) < 4 and p > 0.05'
p_cut = 'atcPIDBelle(4,2) > 0.6 and atcPIDBelle(4,3) > 0.6 and muIDBelle < 0.98 and eIDBelle < 0.98 and d0 < 1 and abs(z0) < 4 and p > 0.05'
```

# Decay modes of tau without e and mu ID cuts

