

For Kin3

since we do not have the dp I use the actual momentum instead.

Following are the data with

1 electron PID : T3 no edm && (prl\_sum/electron\_momentum)>0.6

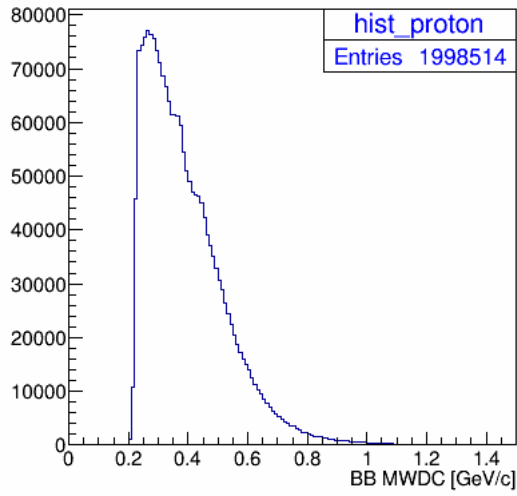
2 L vertex cut :  $|z| \leq 0.075$  m

3. proton PID: graphic E vs p

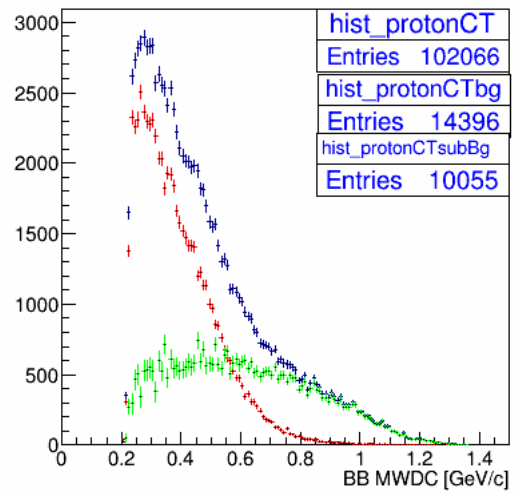
4. add CT time :  $\pm 3.5$  ns

5. \*add the estimated coincidence vertex:  $\text{abs}(rpl.z - BB.tr.tg\_y * 1.12 + 0.007) \leq 0.04$

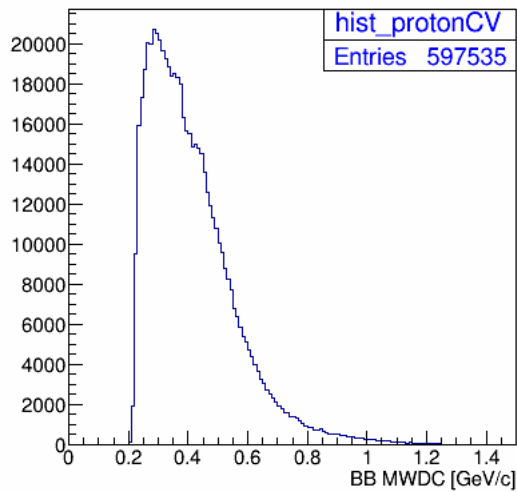
hist\_proton



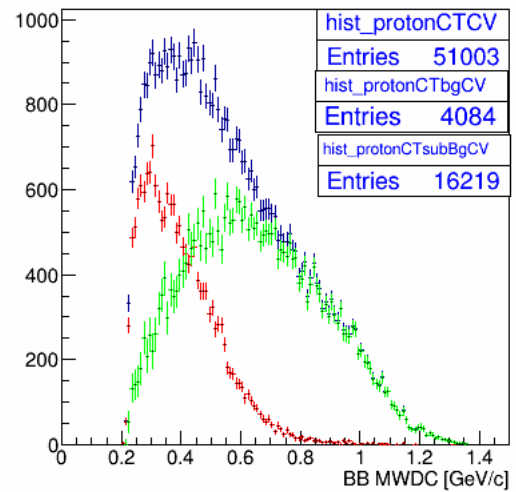
hist\_protonCT



hist\_protonCV



hist\_protonCTCV

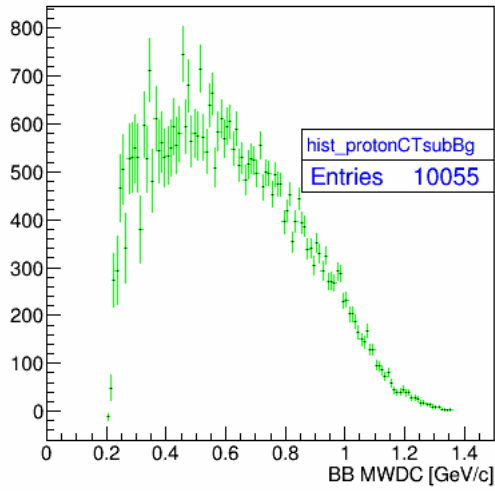


CT: 102066  
 CTCV: 51003

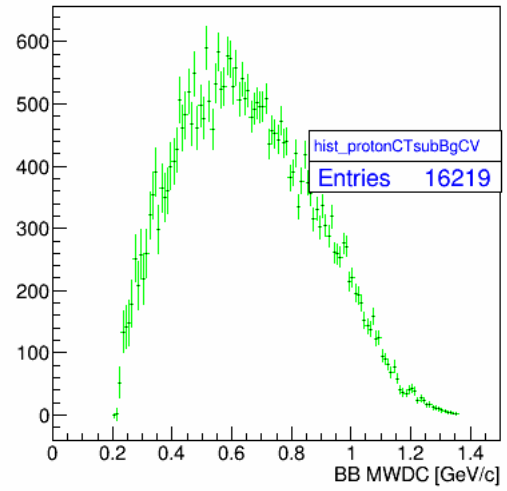
CTbg: 61511  
 CTbgCV: 17637

CT-bg: 40555  
 CTCV-bg: 33366

hist\_protonCTsubBg

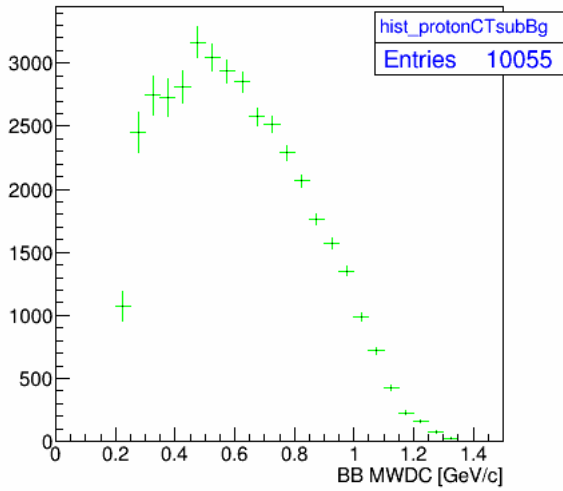


hist\_protonCTsubBgCV

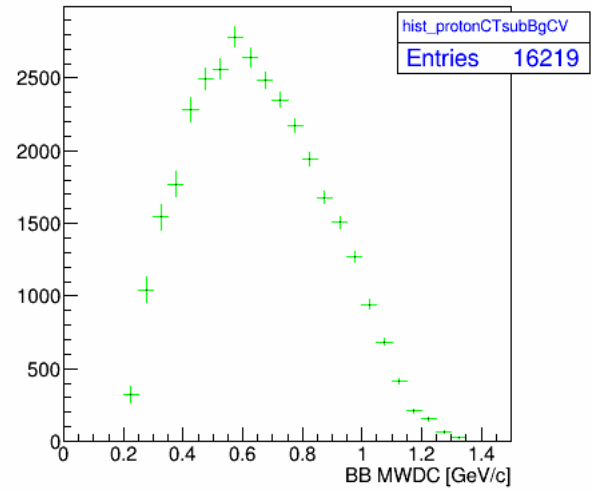


10 MeV/c/bin

hist\_protonCTsubBg

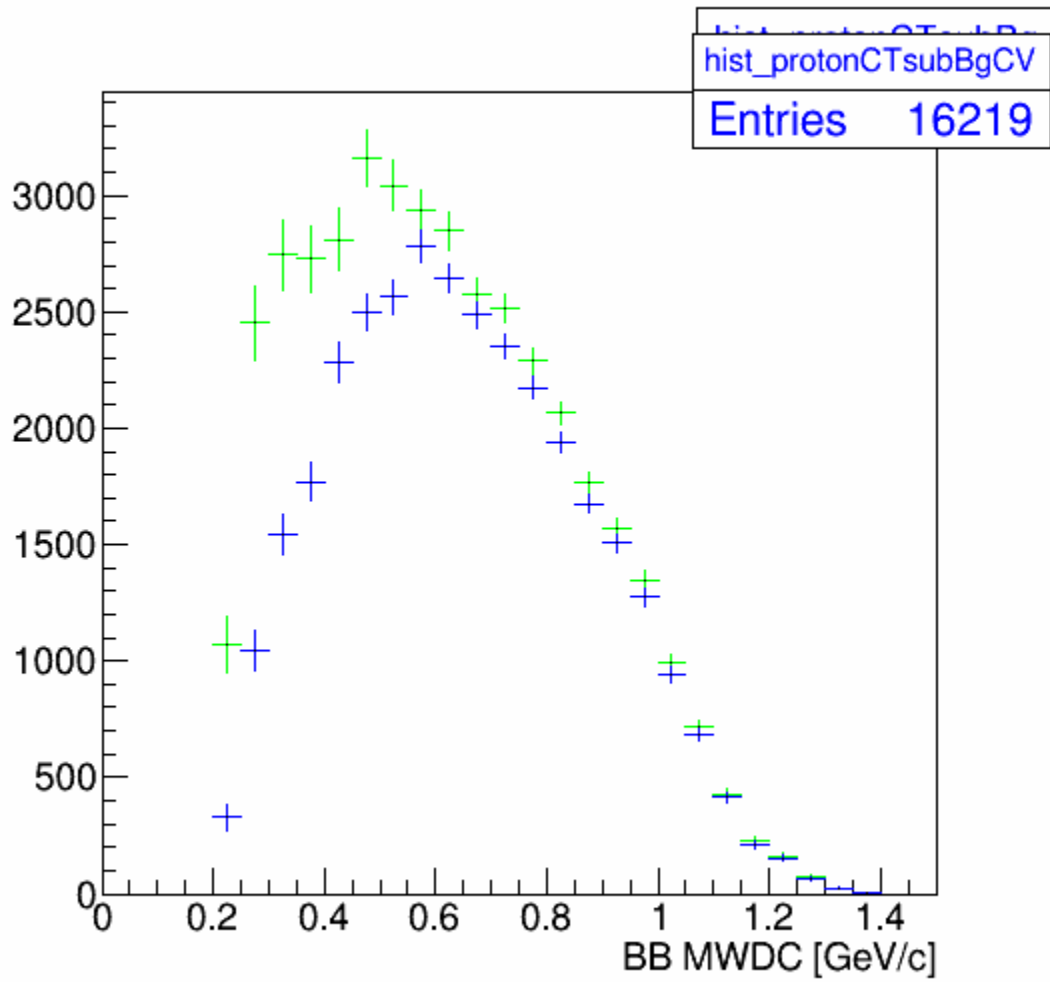


hist\_protonCTsubBgCV



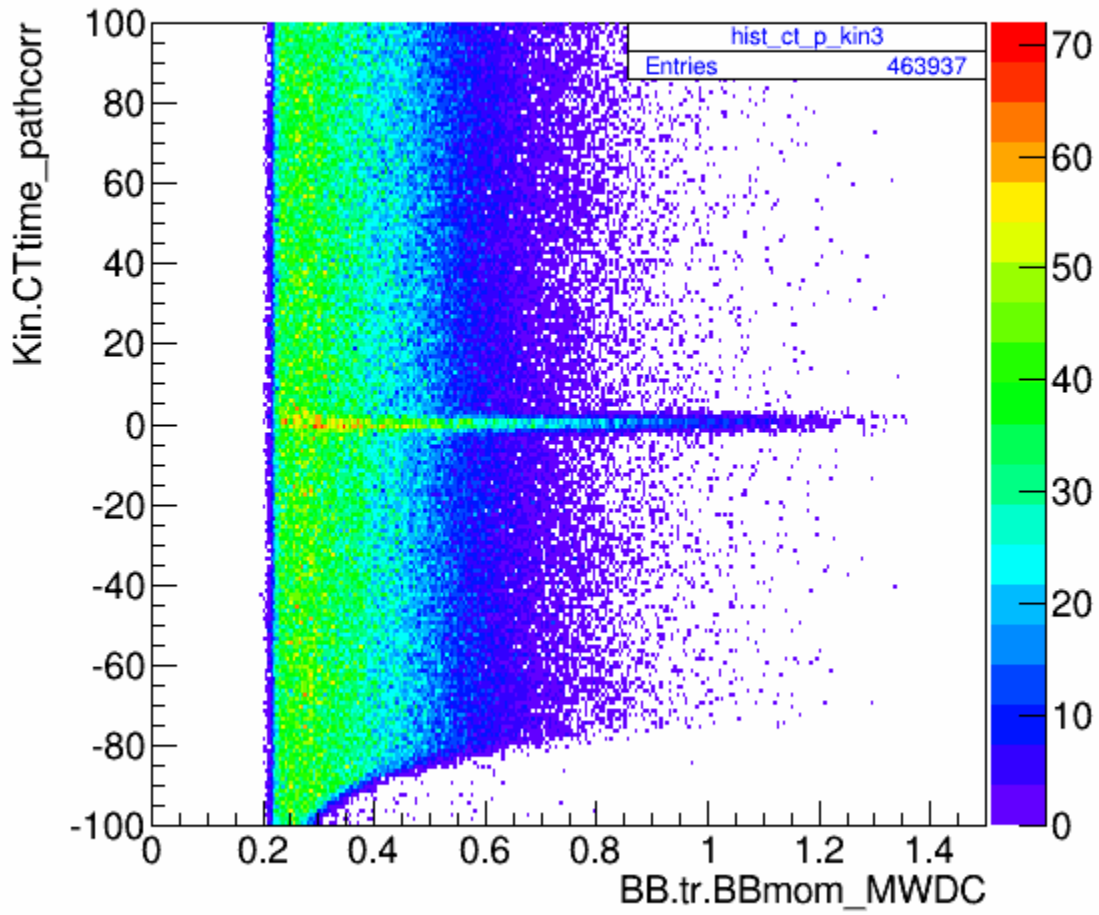
50 MeV/c/bin

# hist\_protonCTsubBg



Momentum distribution with background subtraction  
in 50 MeV/c/bin  
green: protonCTsubBg  
blue: protonCTsubBgCV

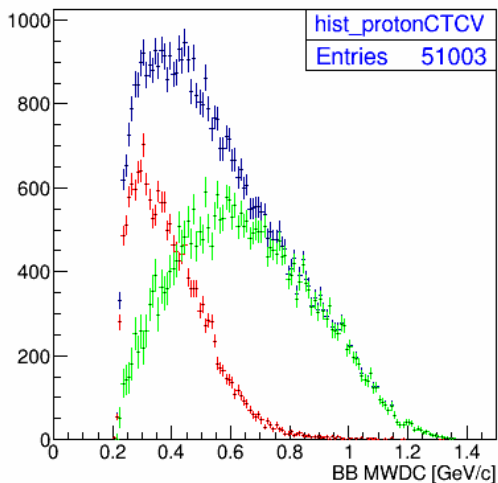
# hist\_ct\_p\_kin3



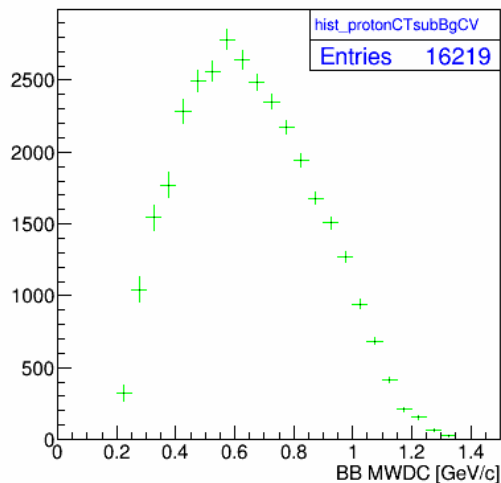
The CT vs momentum showing the background in term of momentum dependence for Kin3.

Test variation of the CV cut

hist\_protonCTCV\_4\_cm

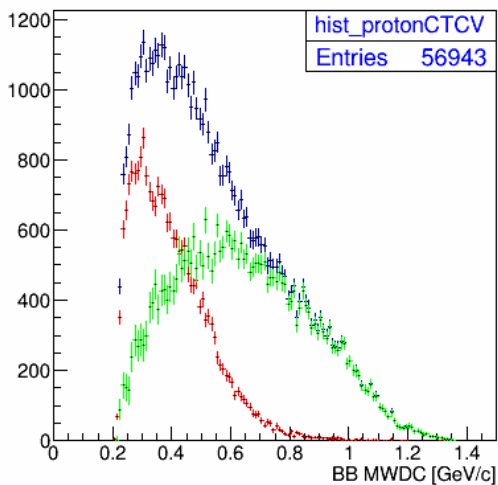


hist\_protonCTsubBgCV

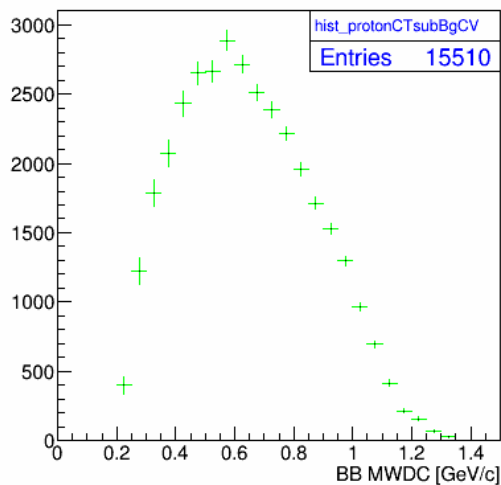


CTCV: 51003 CTbgCV: 17637 CTCV-bg: 33366 +/- 225 +/- 132

hist\_protonCTCV\_5\_cm

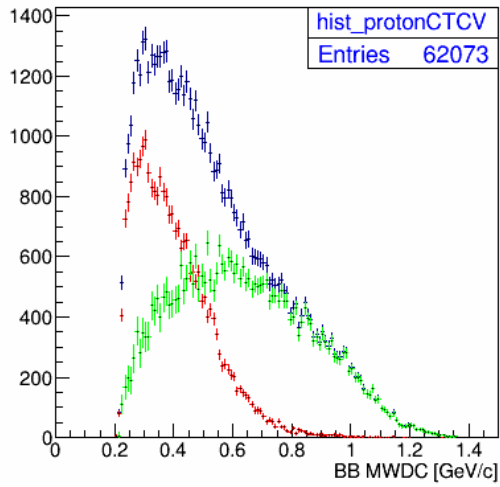


hist\_protonCTsubBgCV

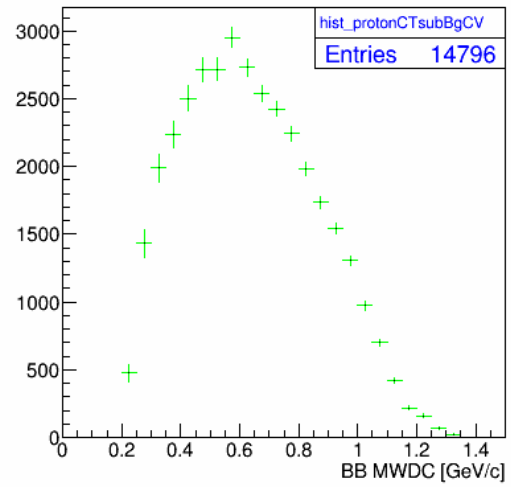


CTCV: 56943 CTbgCV: 21960 CTCV-bg: 34983 +/- 238 +/- 148

hist\_protonCTCV\_6\_cm

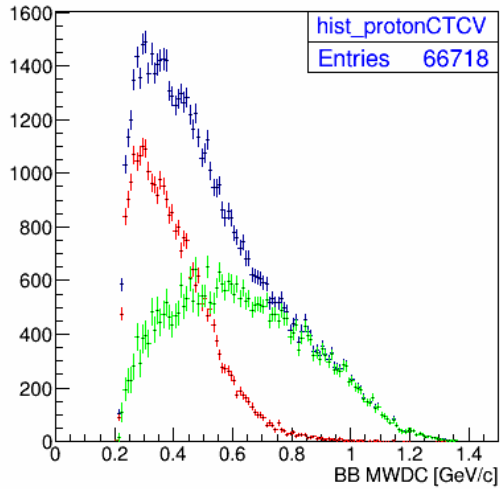


hist\_protonCTsubBgCV

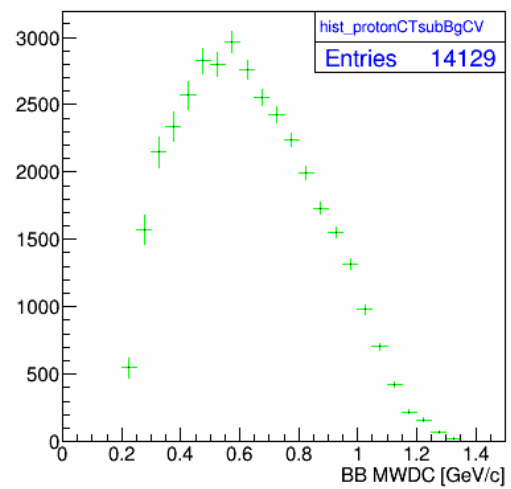


CTCV: 62073 CTbgCV: 25979 CTCV-bg: 36094 +/- 249 +/- 161

hist\_protonCTCV\_7\_cm



hist\_protonCTsubBgCV



CTCV: 66718 CTbgCV: 29791 CTCV-bg: 36927 +/- 258 +/- 172