

# RICH

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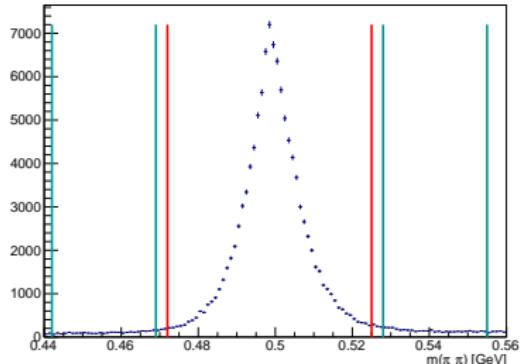
December 3<sup>rd</sup> 2013

# RICH cuts

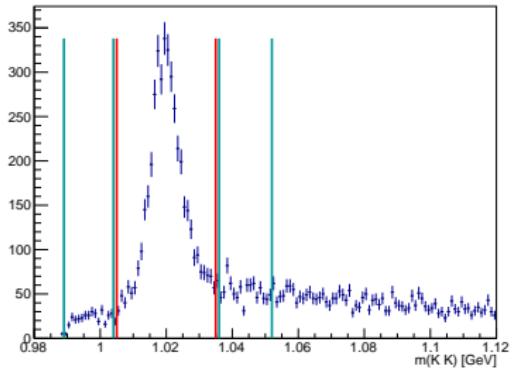
- Remove RICH pipe
- Pions
  - $LH(\pi)/LH(K) > 1$
  - $LH(\pi)/LH(p) > 1$
  - $LH(\pi)/LH(bg) > 1$
- Kaons
  - $LH(K)/LH(\pi) > 1.02$
  - $LH(K)/LH(p) > 1$
  - $LH(K)/LH(bg) > 1.24$
- Protons above threshold
  - $LH(p)/LH(\pi) > 1$
  - $LH(p)/LH(K) > 1$
  - $LH(p)/LH(bg) > 1$
- Protons below threshold
  - $LH(bg)/LH(\pi) > 1$
  - $LH(bg)/LH(K) > 1$
  - All  $LH == 0$

# Sidebins

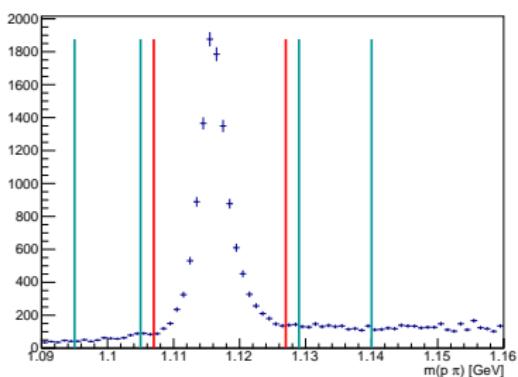
all



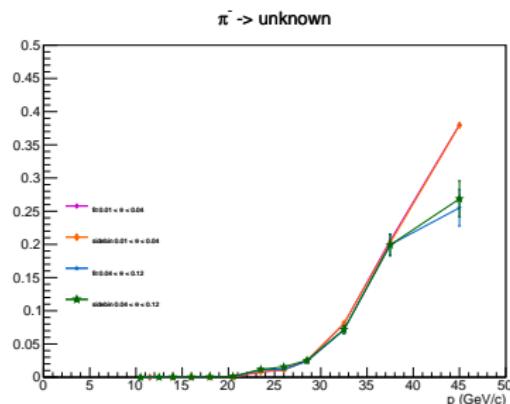
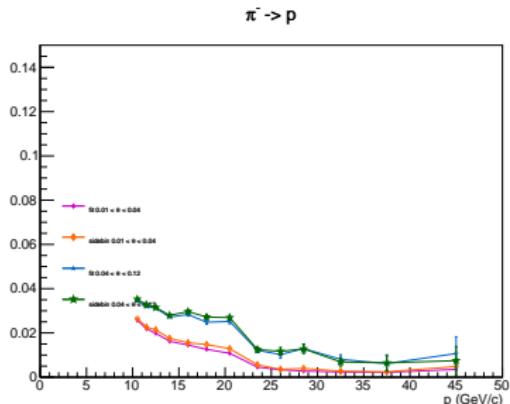
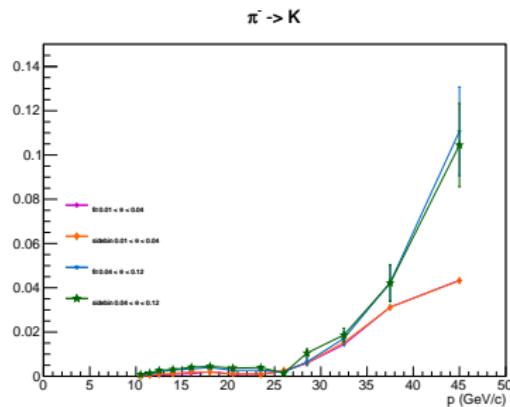
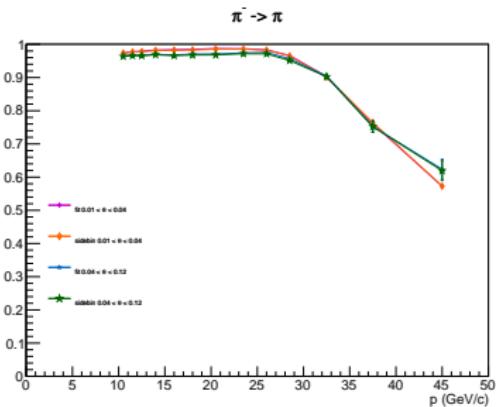
all



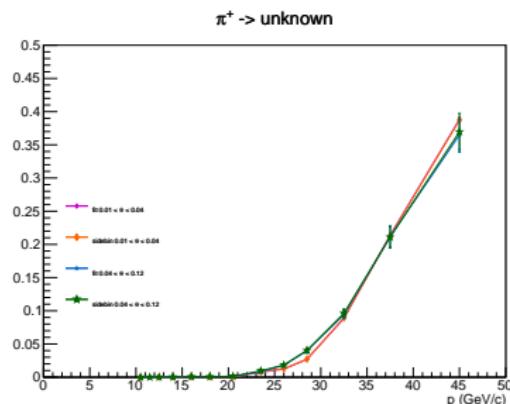
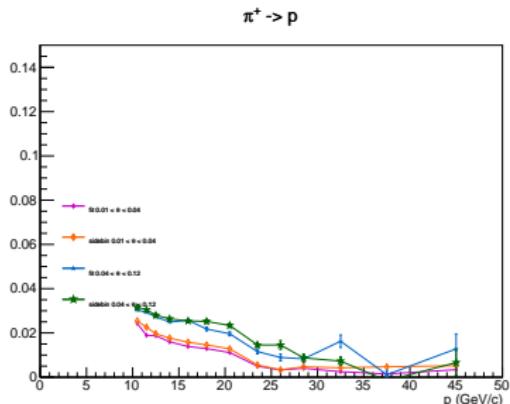
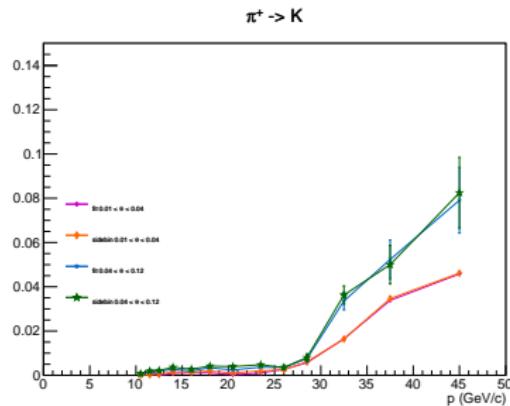
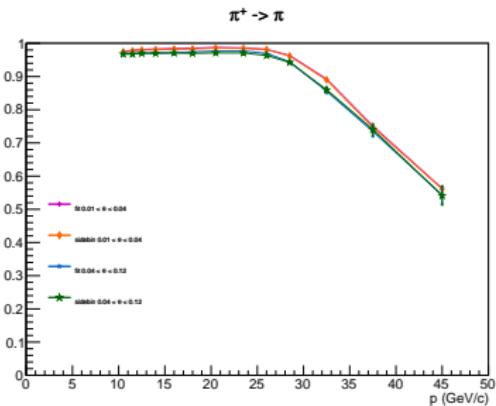
all



# RICH $\pi^-$ (fit/sidebin)

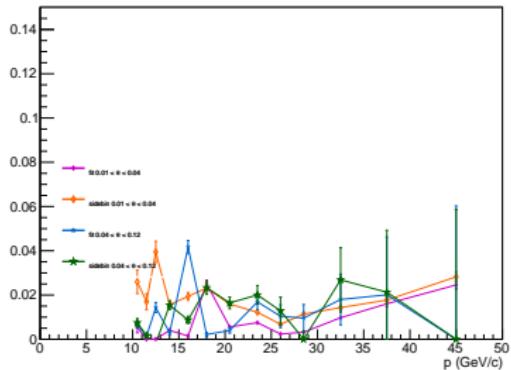


# RICH $\pi^+$ (fit/sidebin)

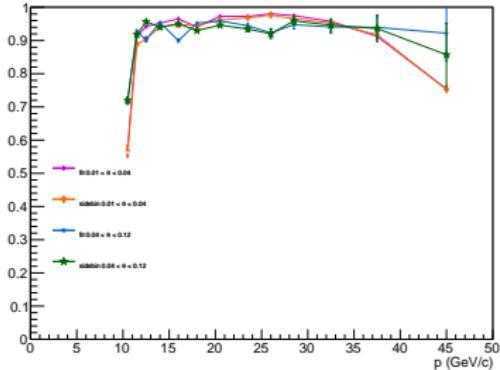


# RICH $K^-$ (fit/sidebin)

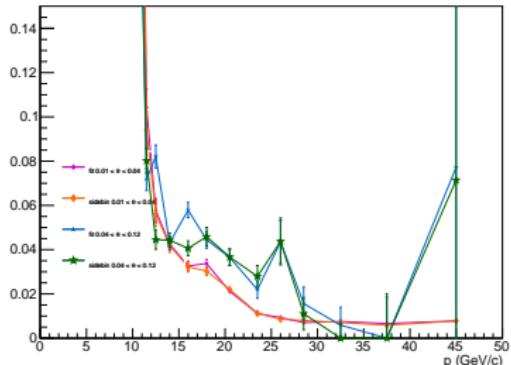
$K^- \rightarrow \pi$



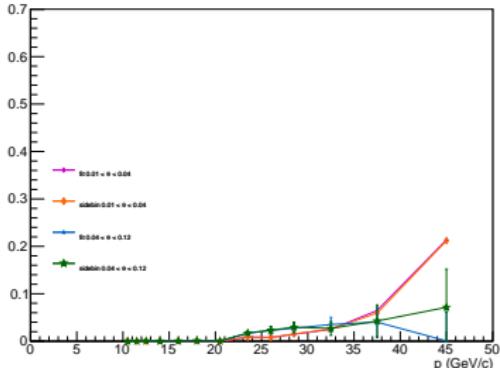
$K^- \rightarrow K$



$K^- \rightarrow p$

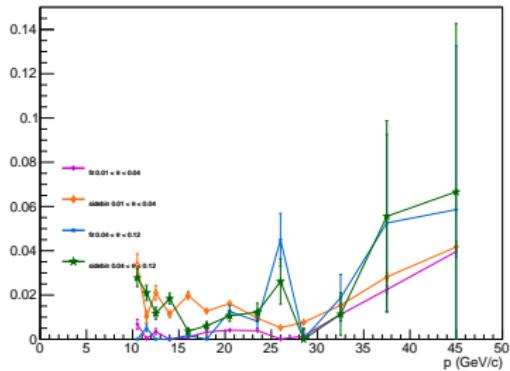


$K^- \rightarrow \text{unknown}$

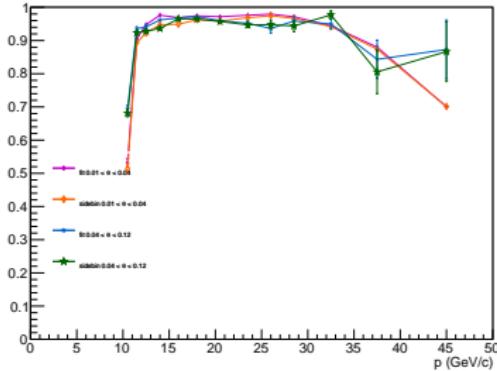


# RICH $K^+$ (fit/sidebin)

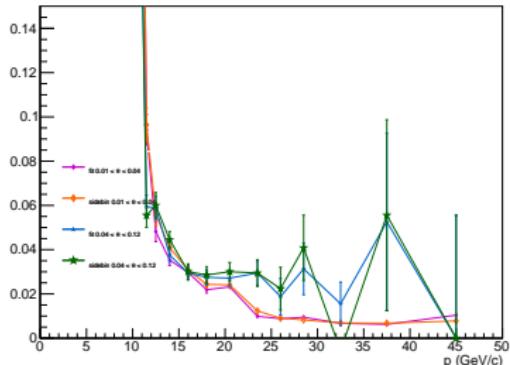
$K^+ \rightarrow \pi$



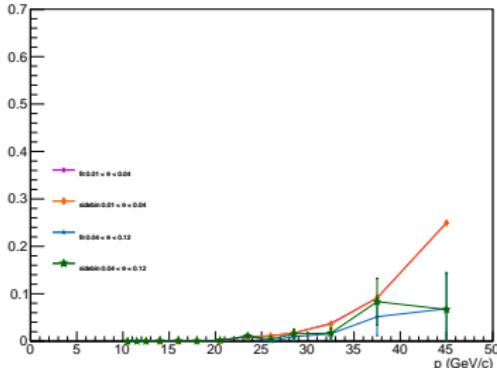
$K^+ \rightarrow K$



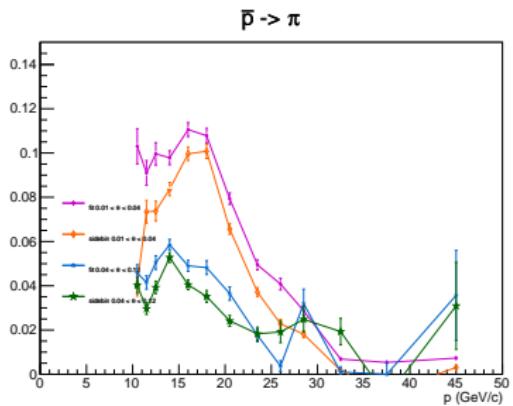
$K^+ \rightarrow p$



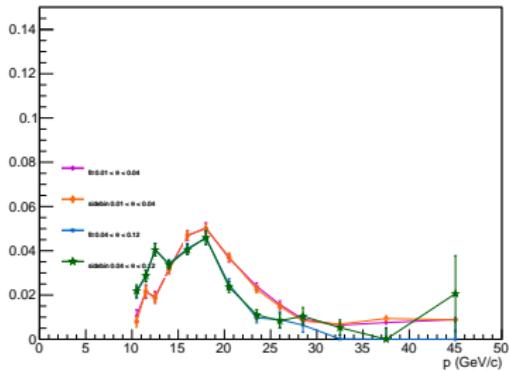
$K^+ \rightarrow \text{unknown}$



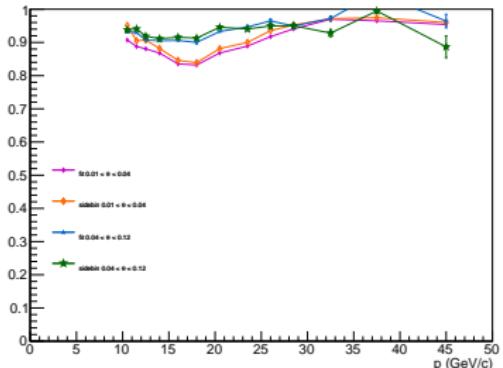
# RICH $\bar{p}$ (fit/sidebin)



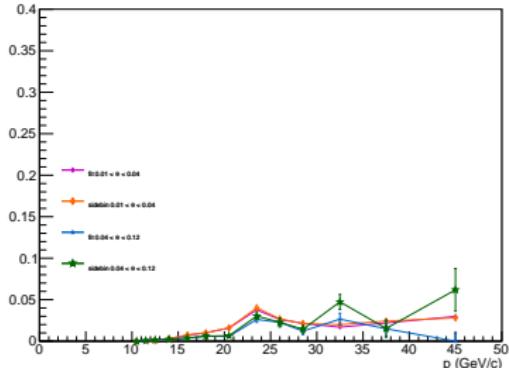
$\bar{p} \rightarrow K$



$\bar{p} \rightarrow p$

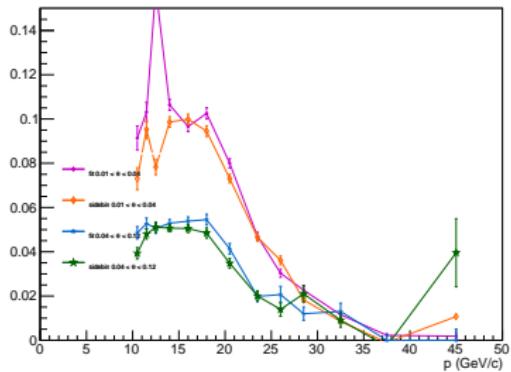


$\bar{p} \rightarrow \text{unknown}$

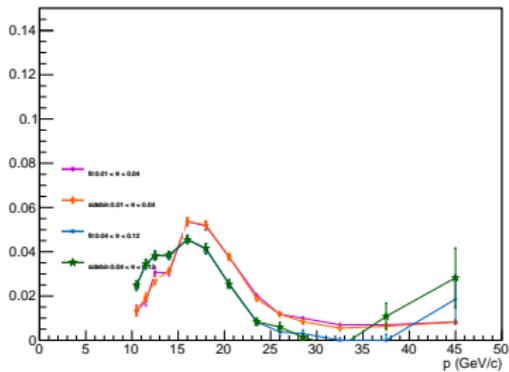


# RICH $p$ (fit/sidebin)

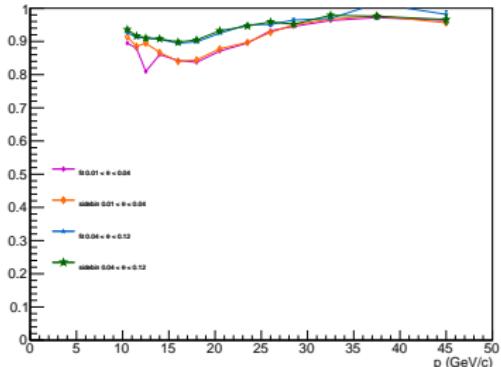
$p \rightarrow \pi$



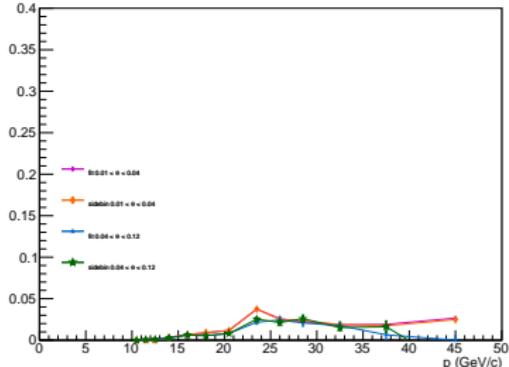
$p \rightarrow K$



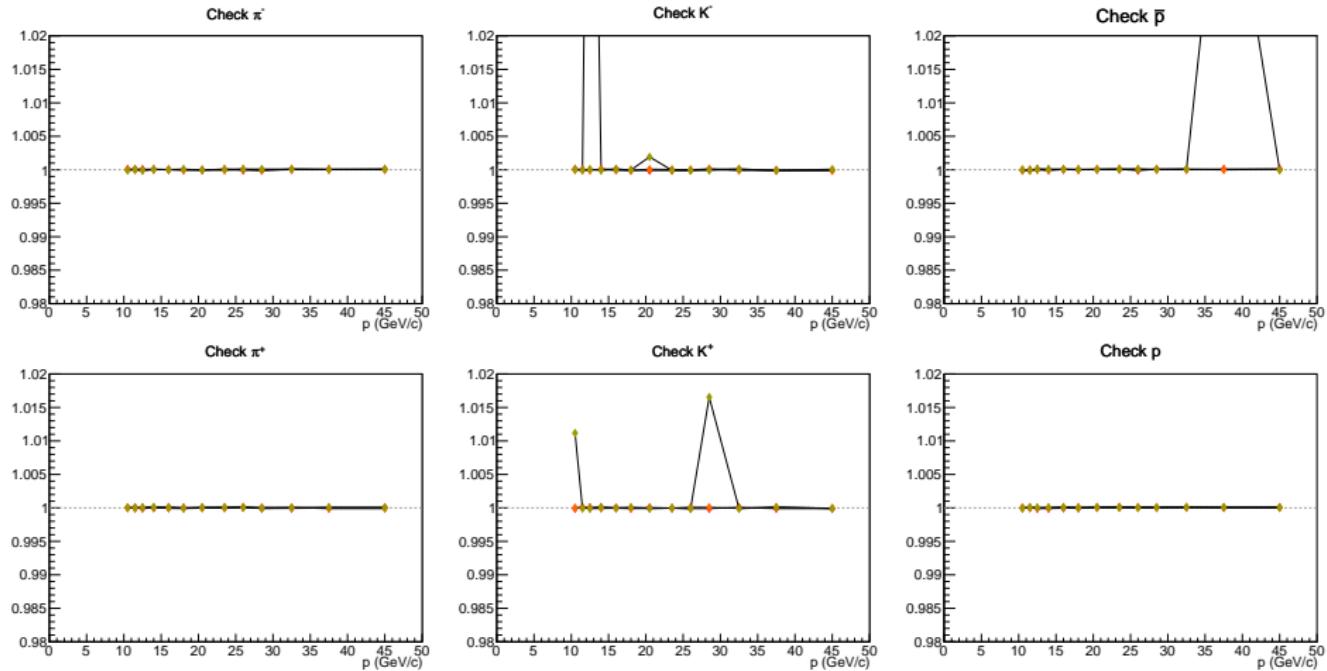
$p \rightarrow p$



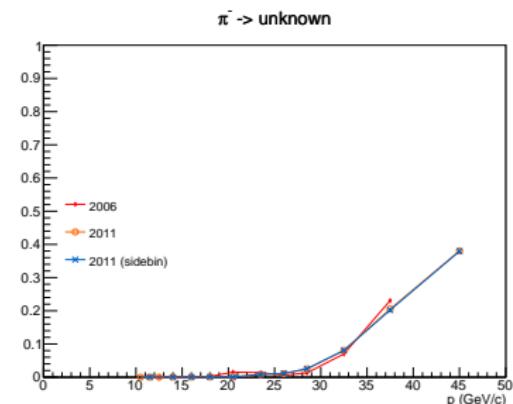
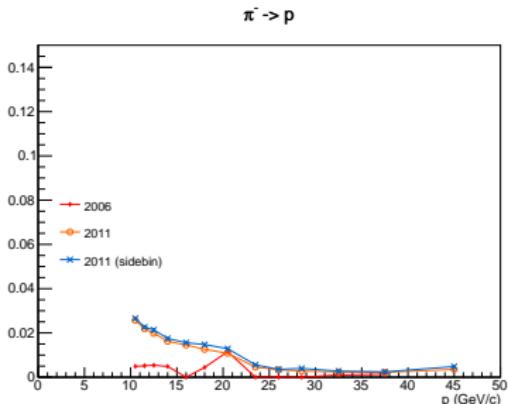
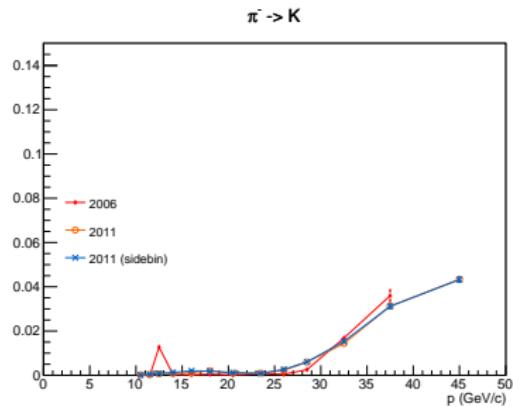
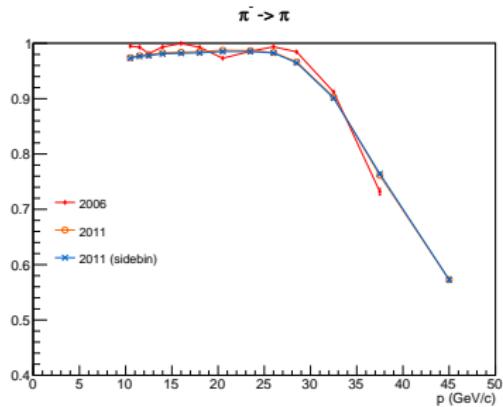
$p \rightarrow \text{unknown}$



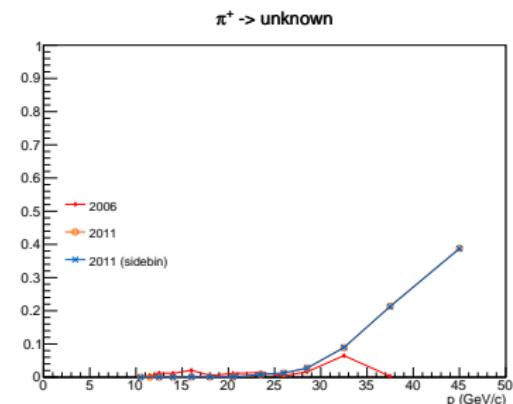
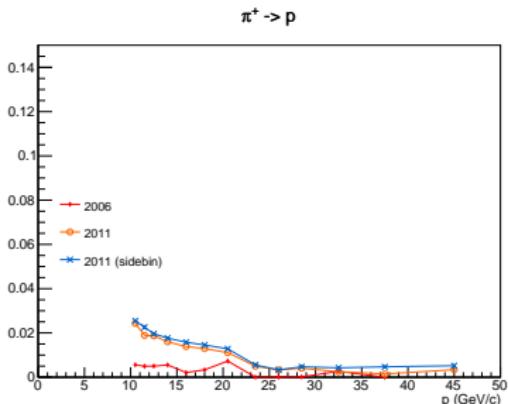
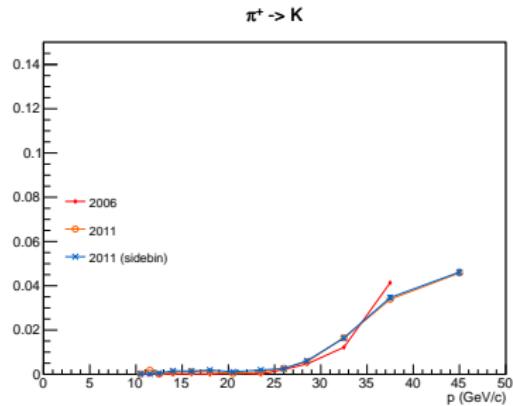
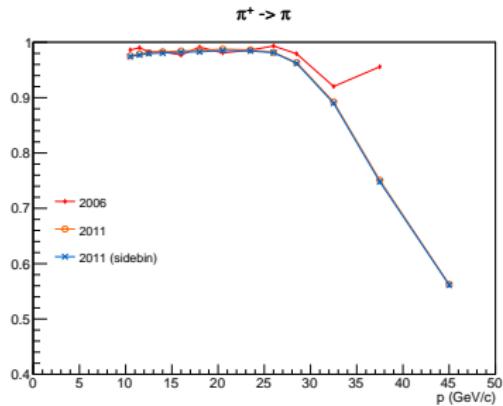
# Sum of all efficiencies



# RICH $\pi^-$ (Quiela)

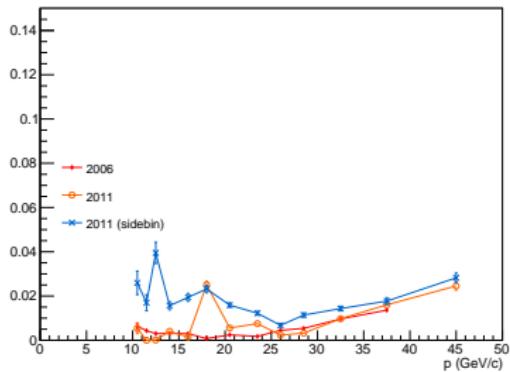


# RICH $\pi^+$ (Quiela)

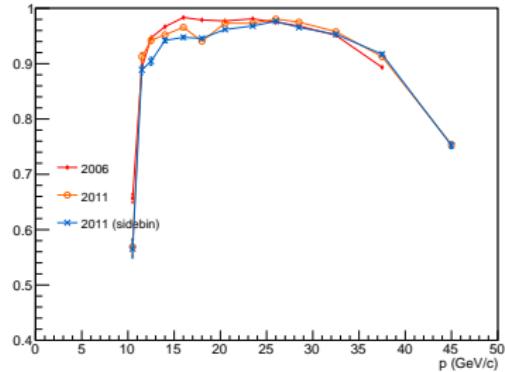


# RICH $K^-$ (Quiela)

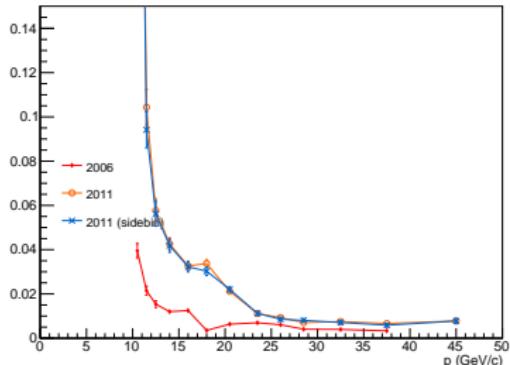
$K^- \rightarrow \pi$



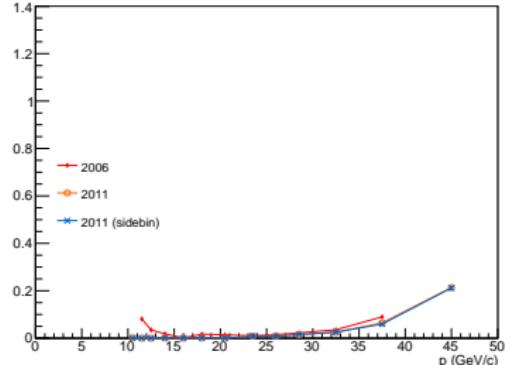
$K^- \rightarrow K$



$K^- \rightarrow p$

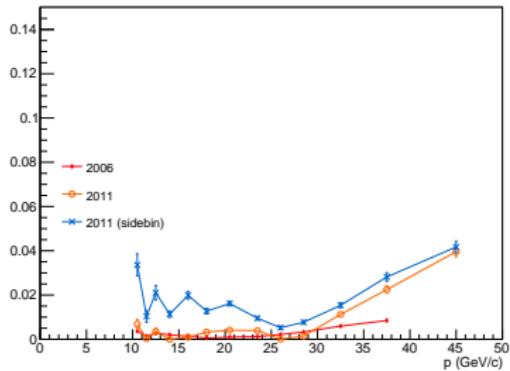


$K^- \rightarrow \text{unknown}$

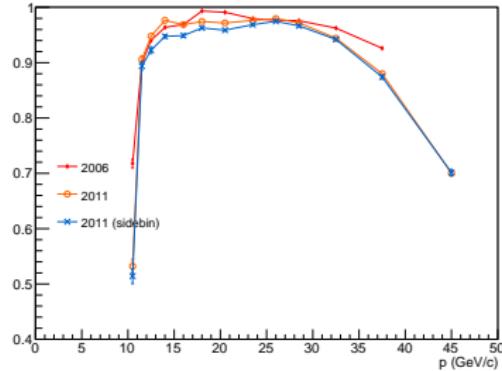


# RICH $K^+$ (Quiela)

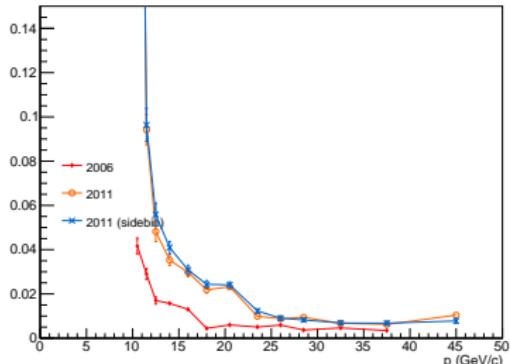
$K^+ \rightarrow \pi$



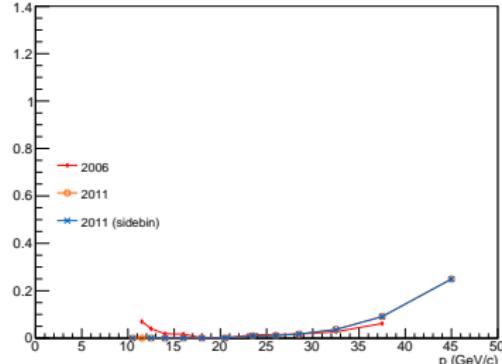
$K^+ \rightarrow K$



$K^+ \rightarrow p$

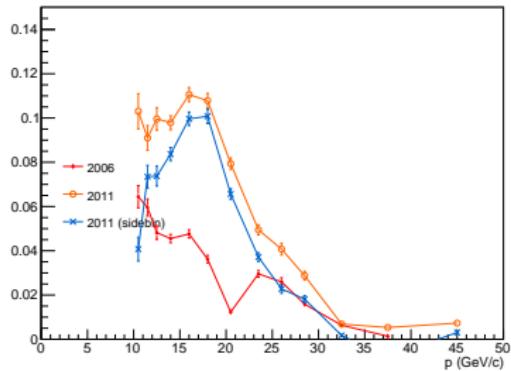


$K^+ \rightarrow \text{unknown}$

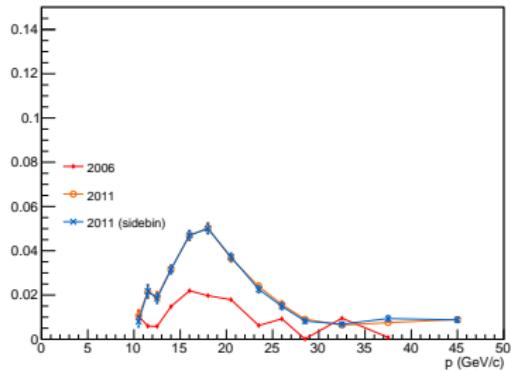


# RICH $\bar{p}$ (Quiela)

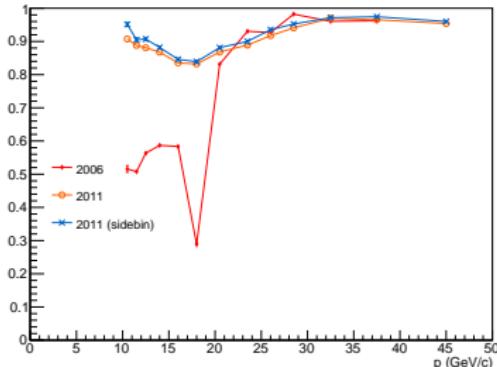
$\bar{p} \rightarrow \pi$



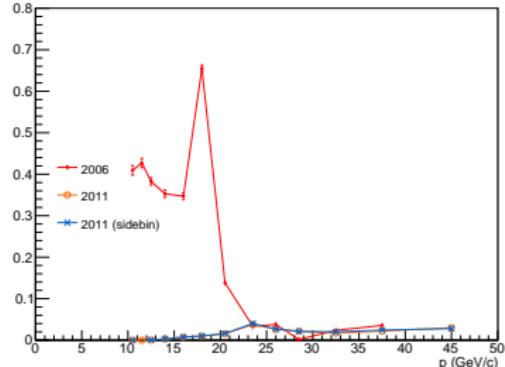
$\bar{p} \rightarrow K$



$\bar{p} \rightarrow p$

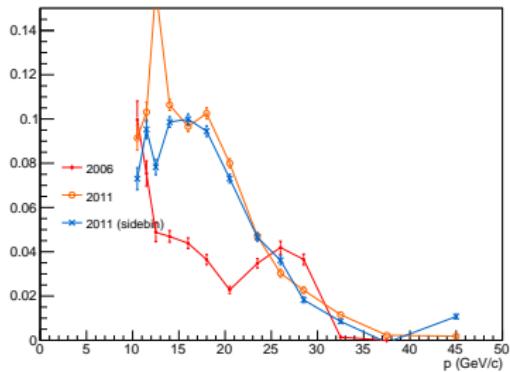


$\bar{p} \rightarrow \text{unknown}$

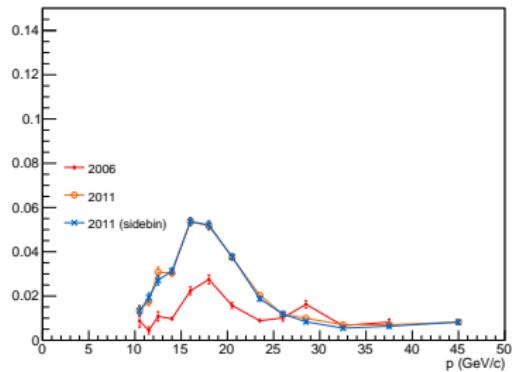


# RICH $\rho$ (Quiela)

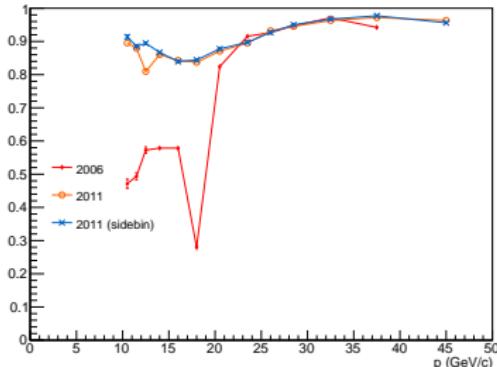
$p \rightarrow \pi$



$p \rightarrow K$



$p \rightarrow p$



$p \rightarrow \text{unknown}$

