

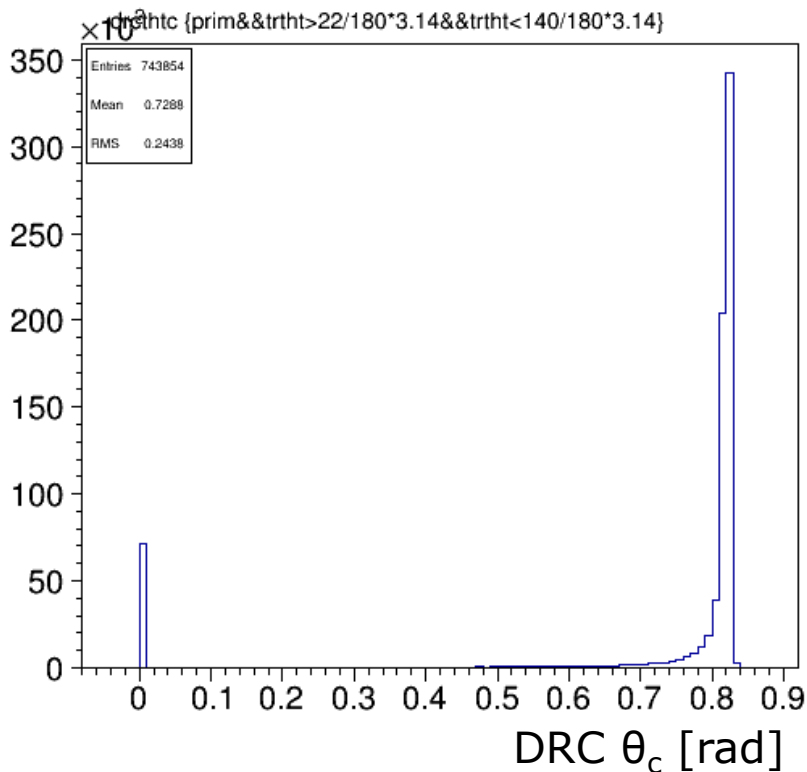
# DRC PID Tracking Efficiency

*GSI, Feb. 2014*

**Klaus Götzen**  
GSI Darmstadt

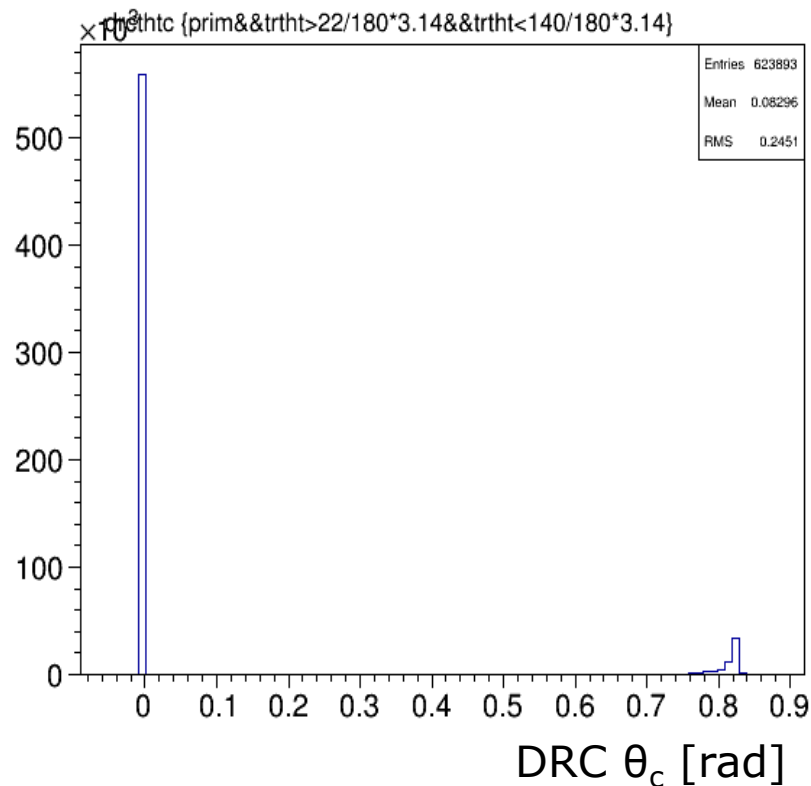
# DRC PID Multiplicities

Nov 2013 (1M tracks)



#Trks in DIRC acceptance: 676k  
#Trks with DIRC signal: 625k  
Eff = 92.4%

Feb 2014 (1.25 M tracks)



#Trks in DIRC acceptance: 567k  
#Trks with DIRC signal: 60k  
Eff = 10.4%

# Total PID - EMC, STT, DRC, MDT

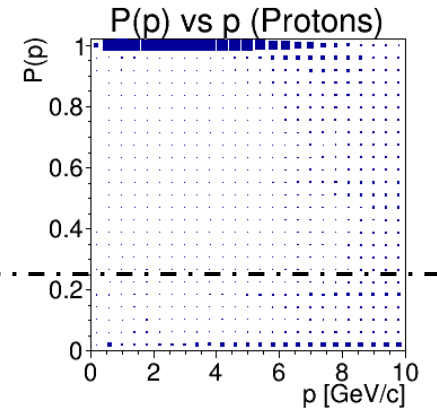
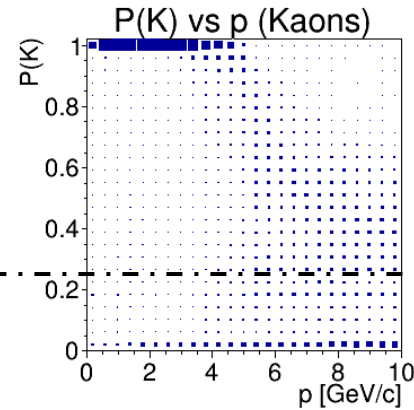
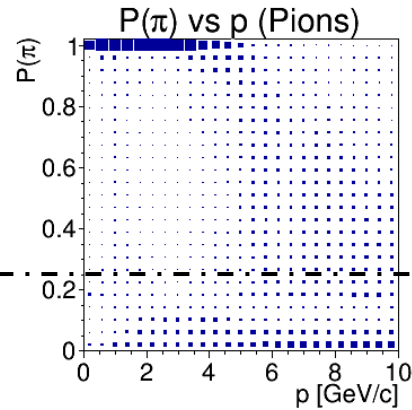
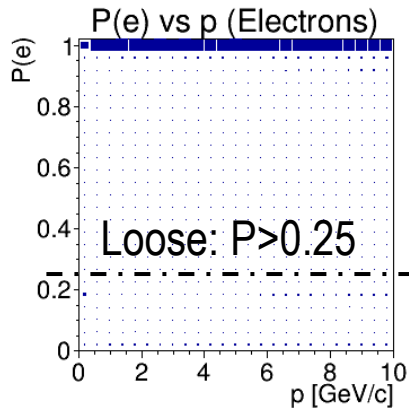
Electron

Pion

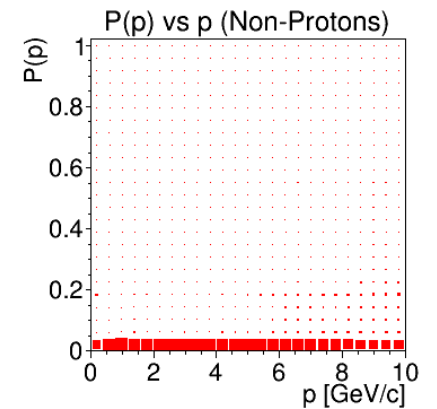
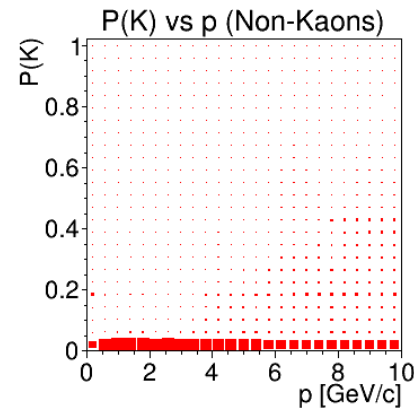
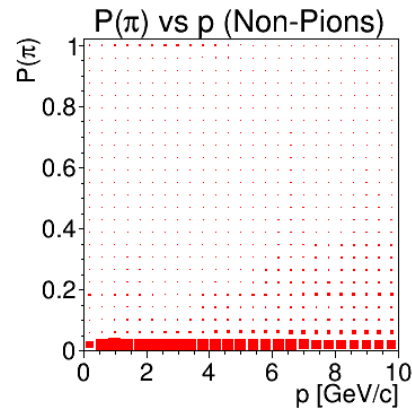
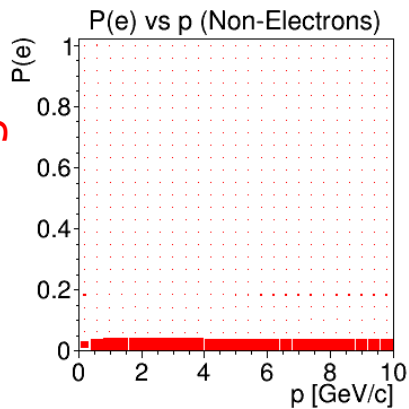
Kaon

Proton

correct



wrong



Nov. 2013

# Total PID - EMC, STT, DRC, MDT

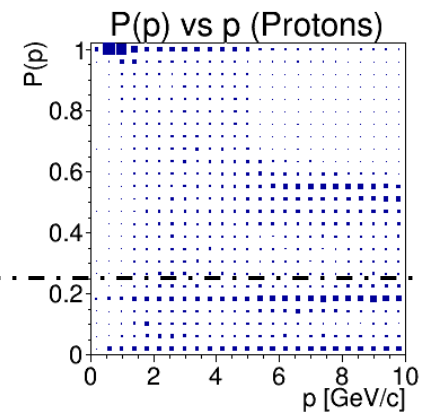
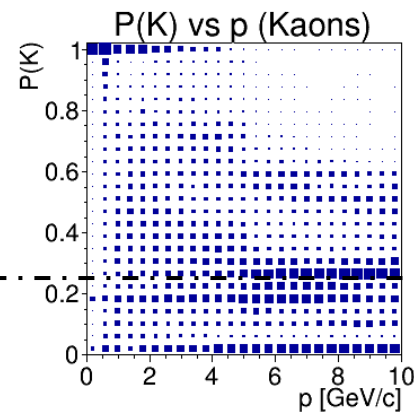
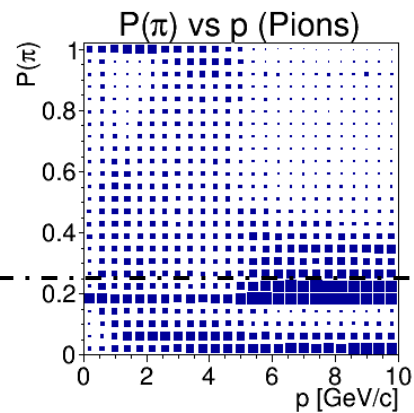
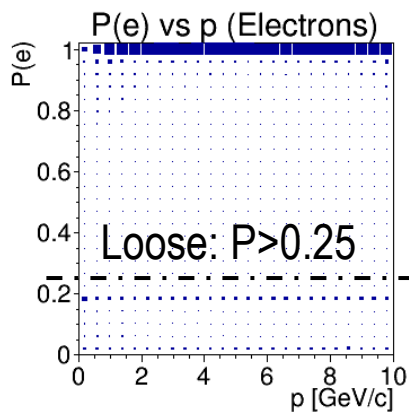
Electron

Pion

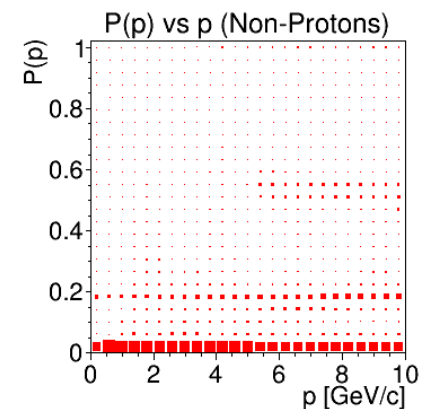
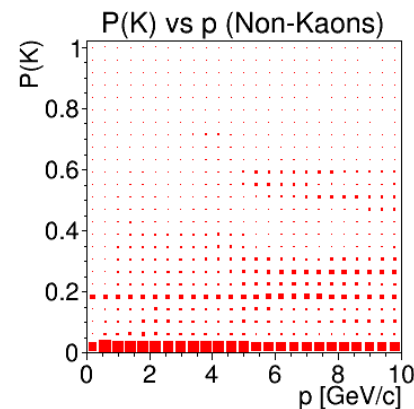
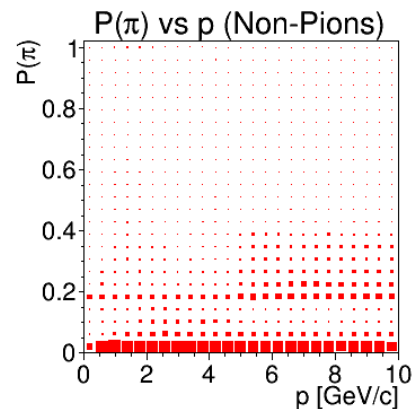
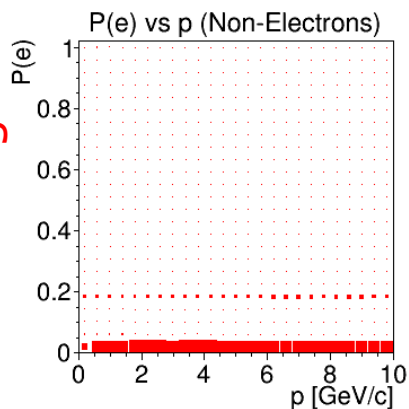
Kaon

Proton

correct



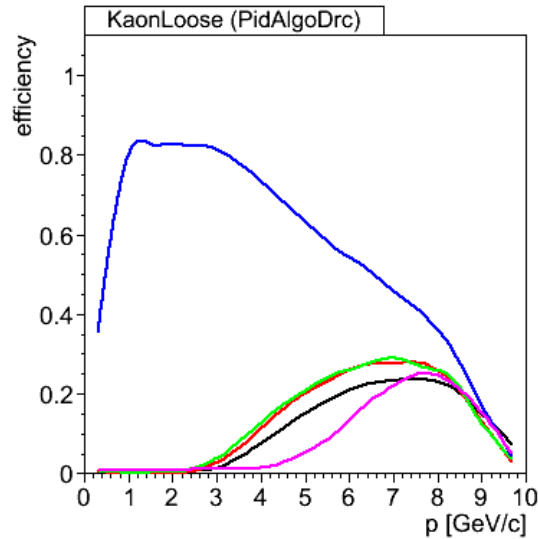
wrong



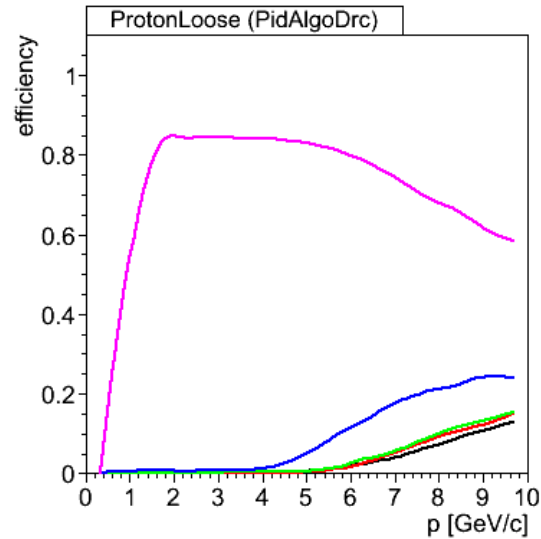
Feb. 2014

# Efficiency DRC: Loose

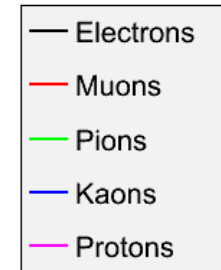
## Kaon



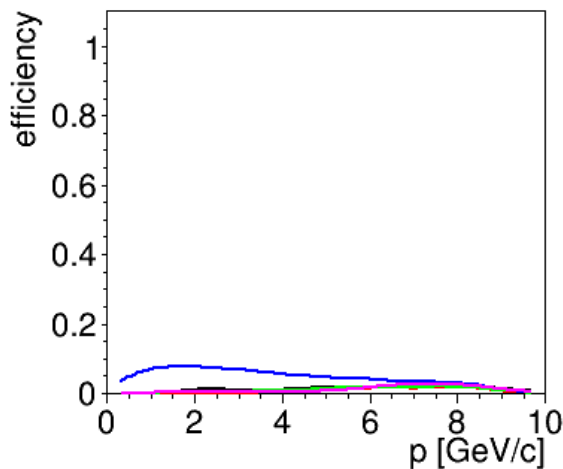
## Proton



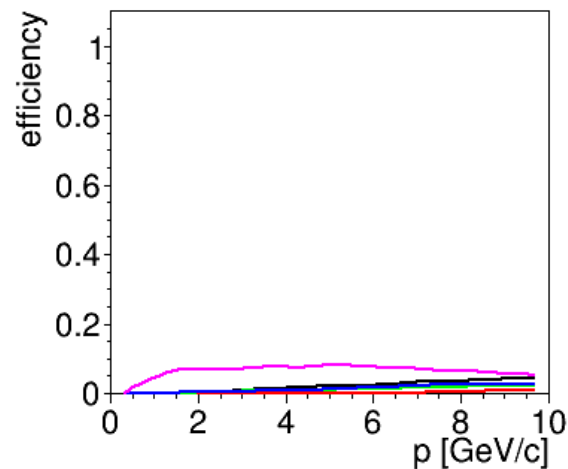
Nov. 2013



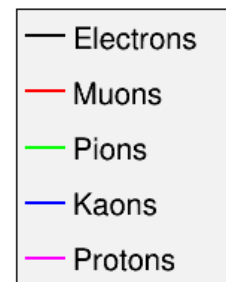
## KaonLoose (PidAlgoDrc)



## ProtonLoose (PidAlgoDrc)



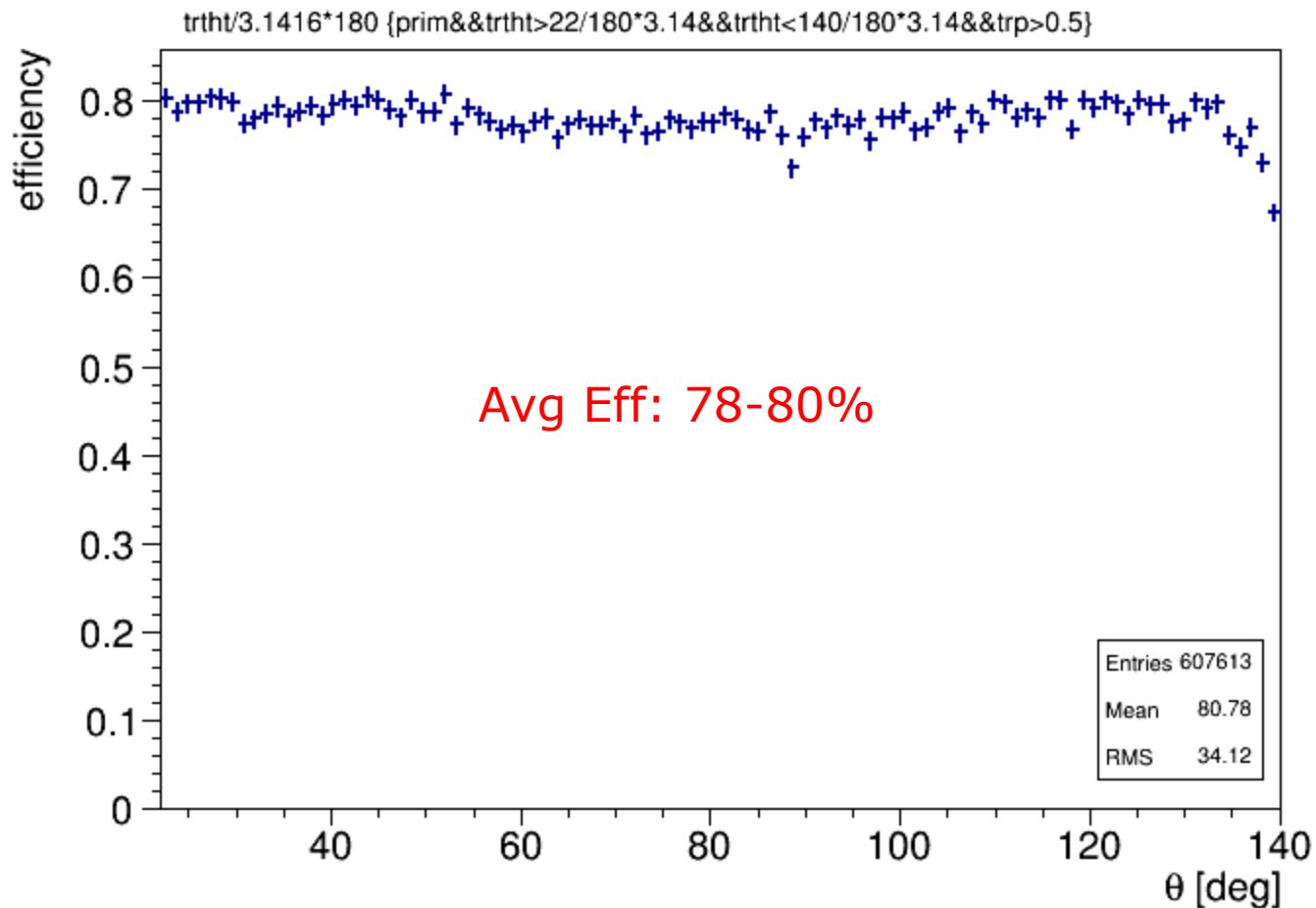
Feb. 2014



# TRACKING Efficiency

# Tracking Efficiency: $22^\circ < \theta < 140^\circ$

all particle types (e, mu, pi, K, p),  $p > 0.5$  GeV/c



# Tracking Efficiency: $\theta < 22^\circ$

all particle types (e, mu, pi, K, p)

