

# ZDC response for $\pi^+$ , $K^+$ detected events

Petr Alekseev

$\pi^+$  &  $K^+$  events (run Id < 4276 only)

“Список номеров ранов и событий с идентифицированными  $\pi^+$  и  $K^+$ ”

Василий Плотников, 17.11.2021

ArCu 3.2AGeV BD>3 (vertex in target)

Run Id: 4014 4015 4016 4017 4020 4066 4067 4068 4069 4071

Петр Алексеев, 19.01.2022

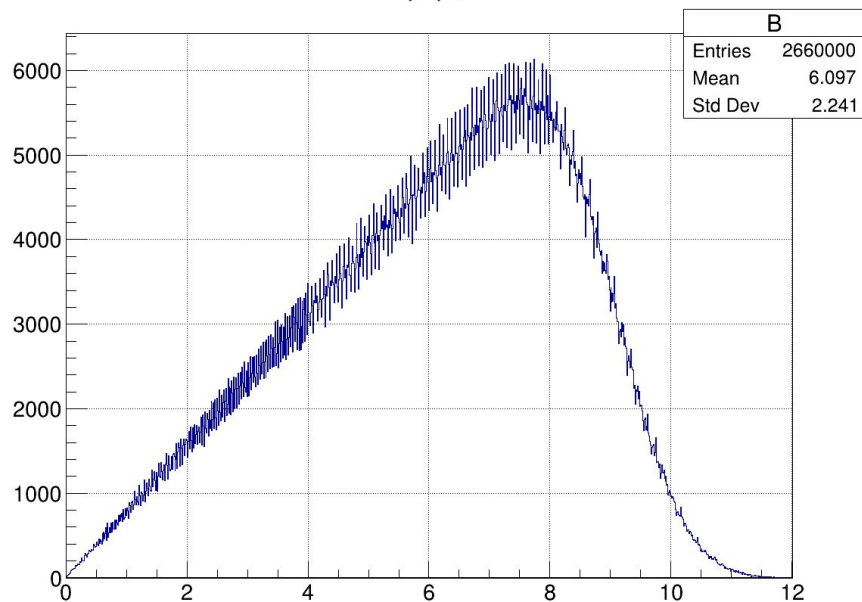
ArCu 3.2AGeV DCMSMM? (MC, reconstructed tracks)

/weekly/dilyana/lalyo/recozdc/Gem\_Dch\_TOF700\_DCMSMMCu\*.root

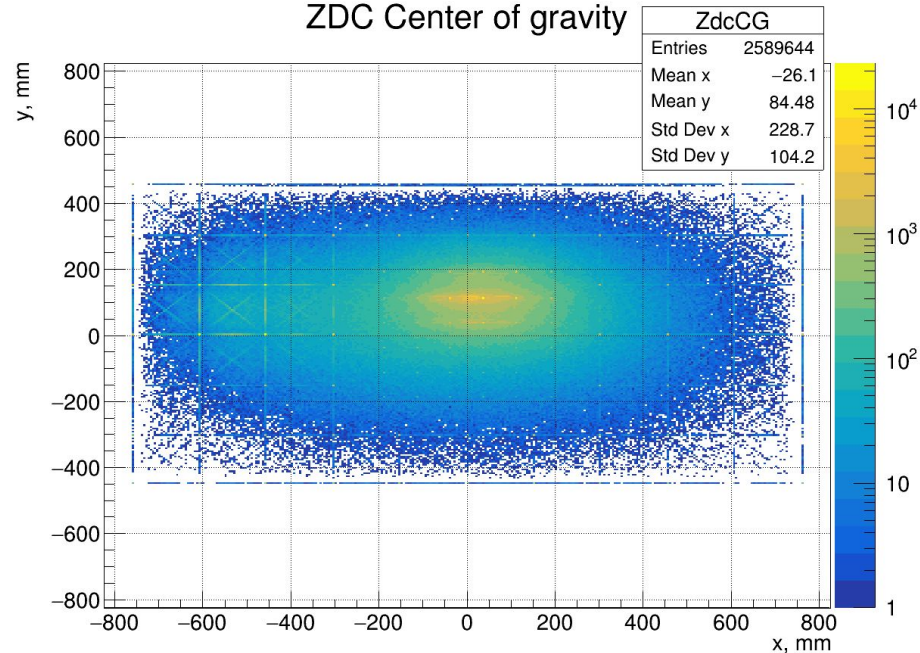
Лальо Ковачев, 19.01.2022

# ArCu 3.2AGeV DCMSMM

Imp. par.

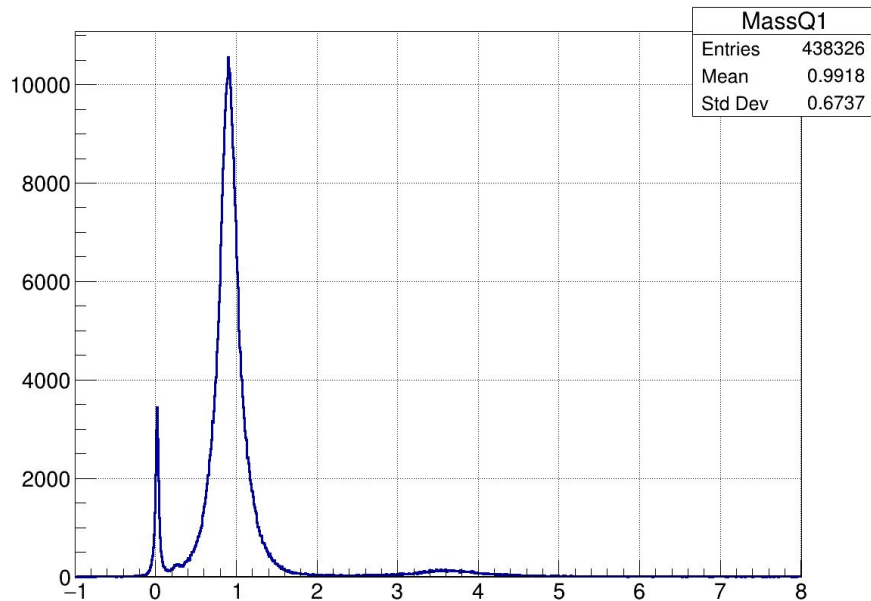


ZDC Center of gravity

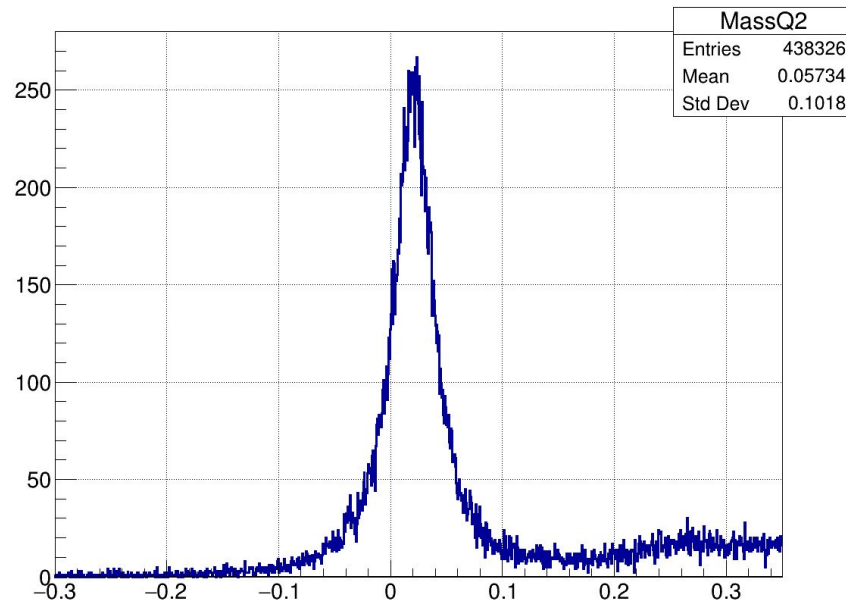


# ArCu 3.2AGeV DCMSMM

MassQ1



MassQ2

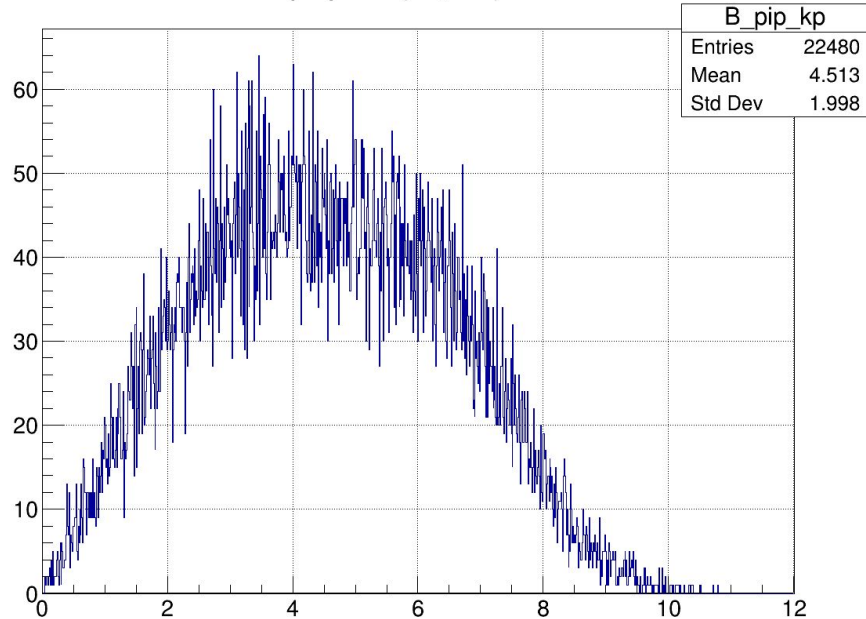


$\pi^+$  (-0.2, 0.16],  $K^+$  (0.16, 0.34)

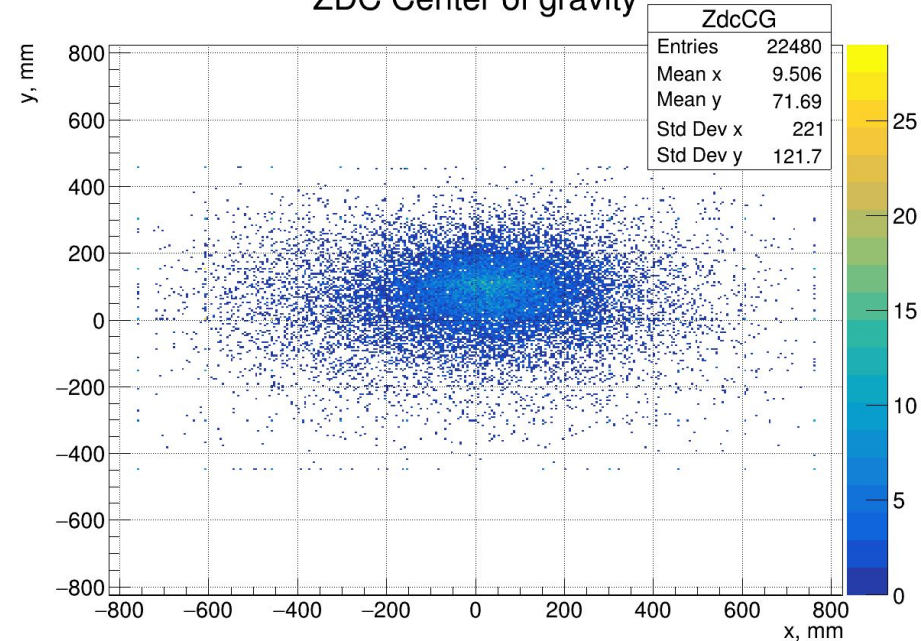
*V. Plotnikov*

# ArCu 3.2AGeV DCM SMM, MassQ = (-0.2, 0.34)

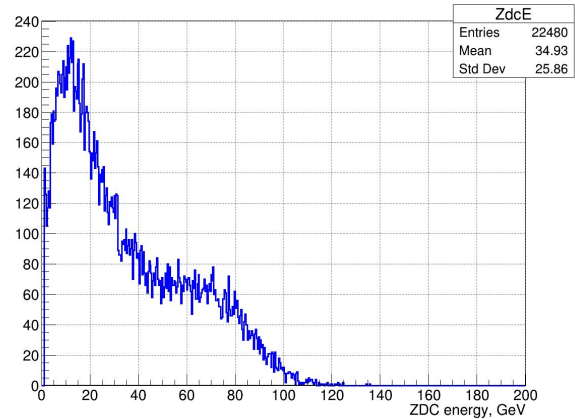
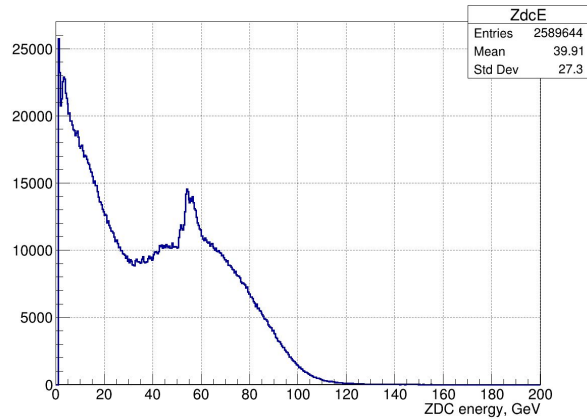
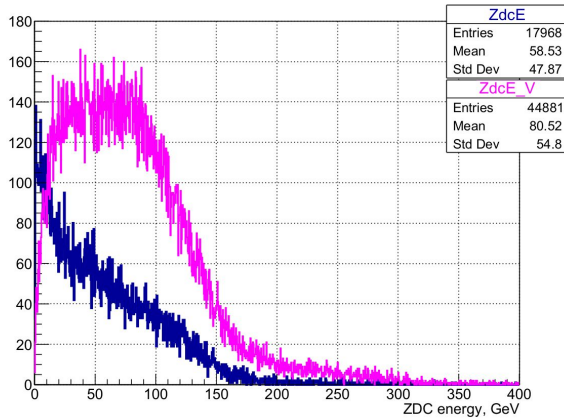
Imp. par. ( $\pi^+$ ,  $K^+$ )



ZDC Center of gravity



# ZDC energy

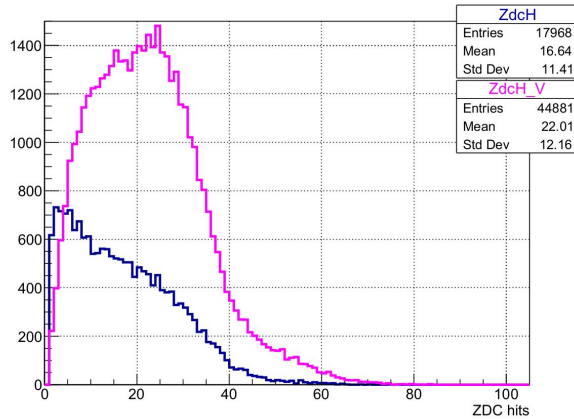


- $\pi^+$  &  $K^+$  events
- ArCu 3.2AGeV  $BD > 3$   
(vertex in target)

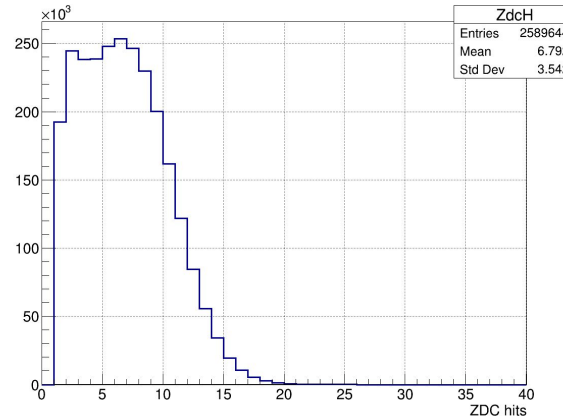
- ArCu 3.2AGeV DCMSMM

- ArCu 3.2AGeV DCMSMM  
MassQ = (-0.2, 0.34)

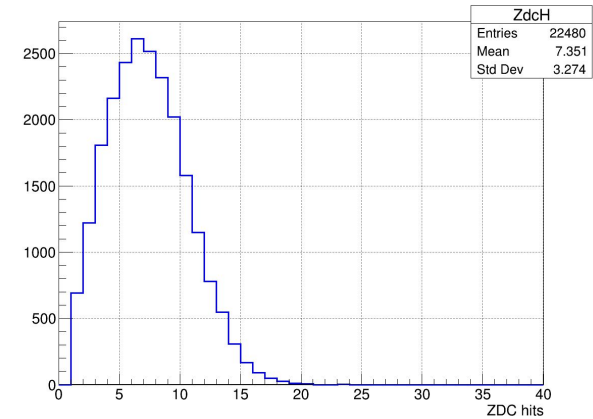
# ZDC multiplicity



- $\pi^+$  &  $K^+$  events
- ArCu 3.2AGeV BD>3 (vertex in target)

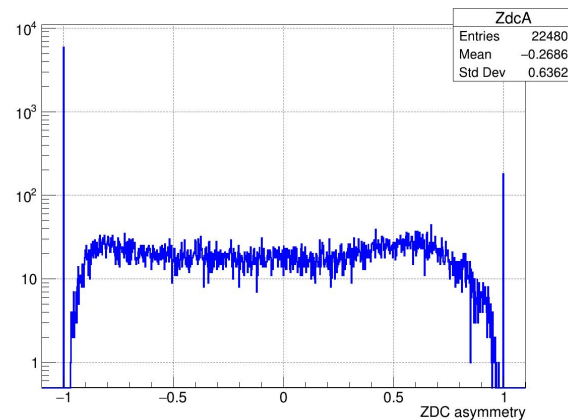
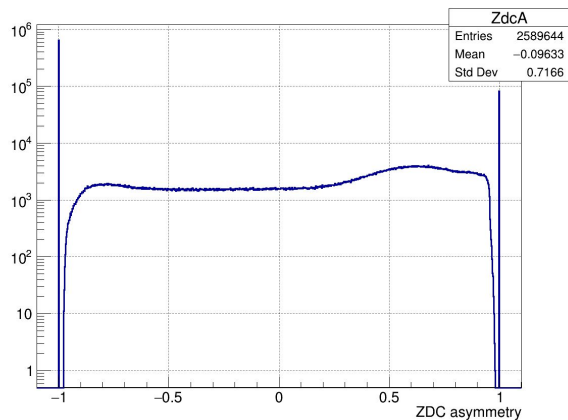
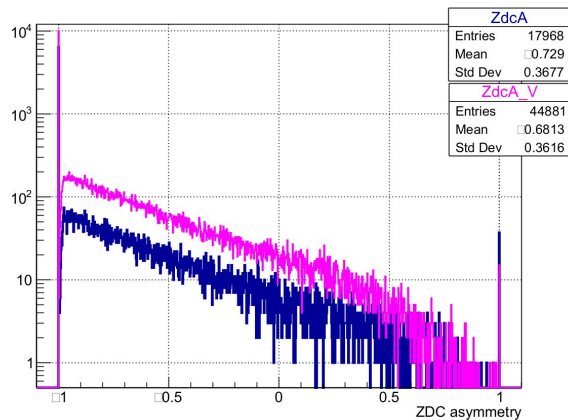


- ArCu 3.2AGeV DCMSSM



- ArCu 3.2AGeV DCMSSM  
MassQ = (-0.2, 0.34)

# ZDC asymmetry



- $\pi^+$  &  $K^+$  events
- ArCu 3.2AGeV BD>3 (vertex in target)

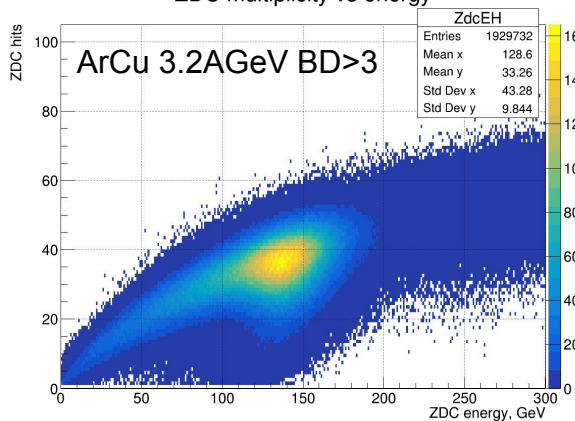
- ArCu 3.2AGeV DCMSSM

- ArCu 3.2AGeV DCMSSM  
MassQ = (-0.2, 0.34)



# ZDC multiplicity vs energy

ZDC multiplicity vs energy



ZDC multiplicity vs energy (vertex in target)

