

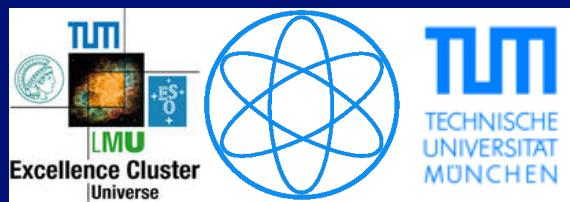


# PID Selection

Joana Wirth

21.04.2016

# EXP: SYSTEM 0

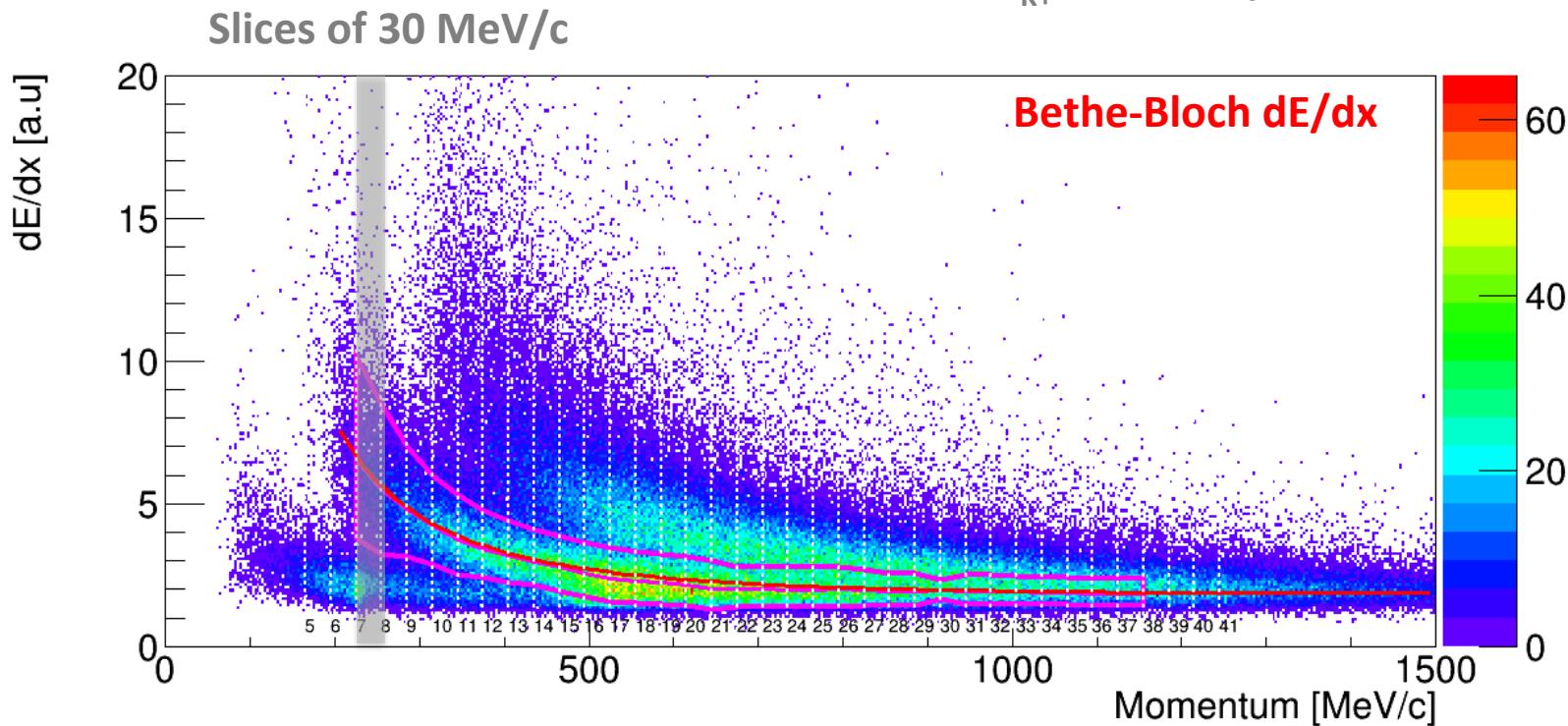


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

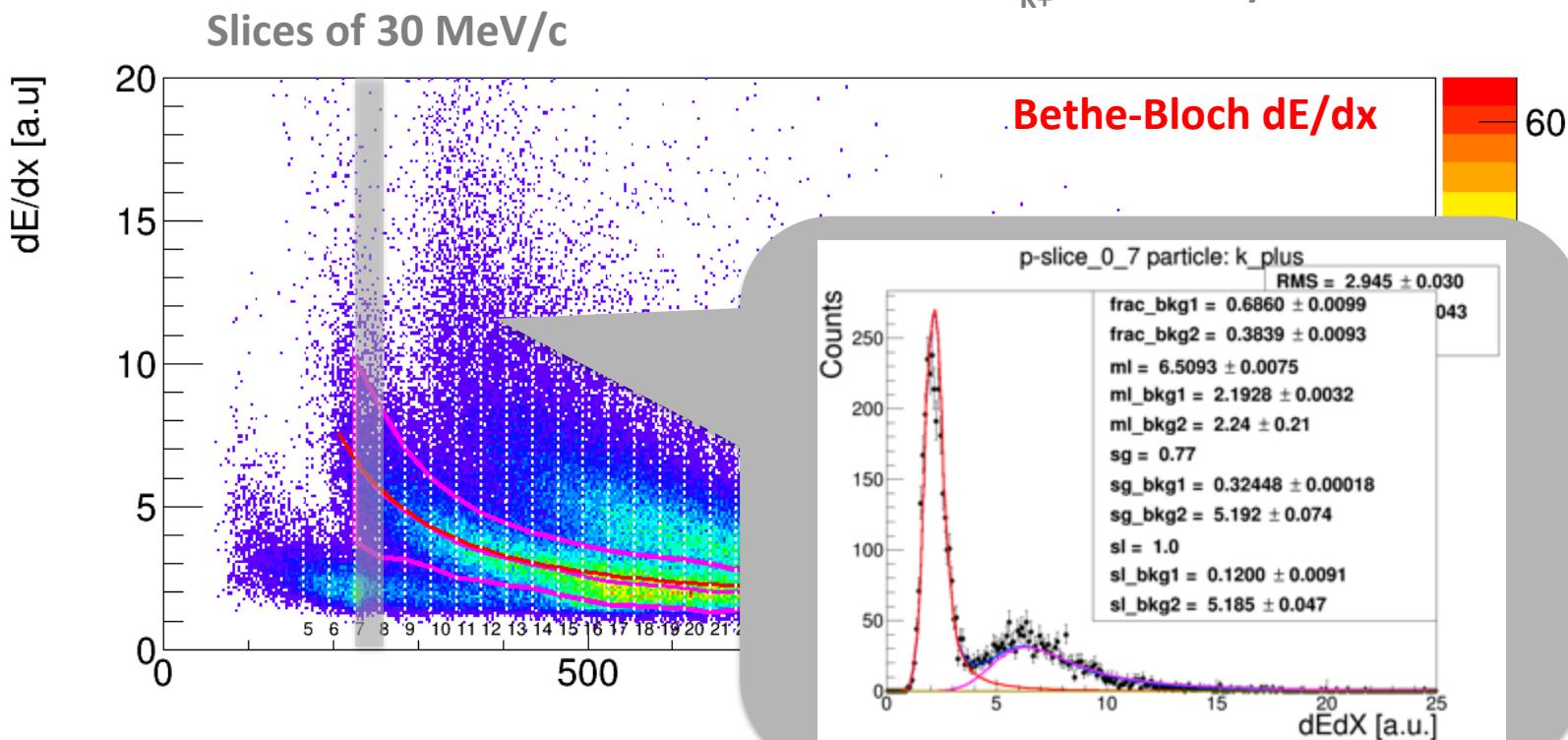
SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$



# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

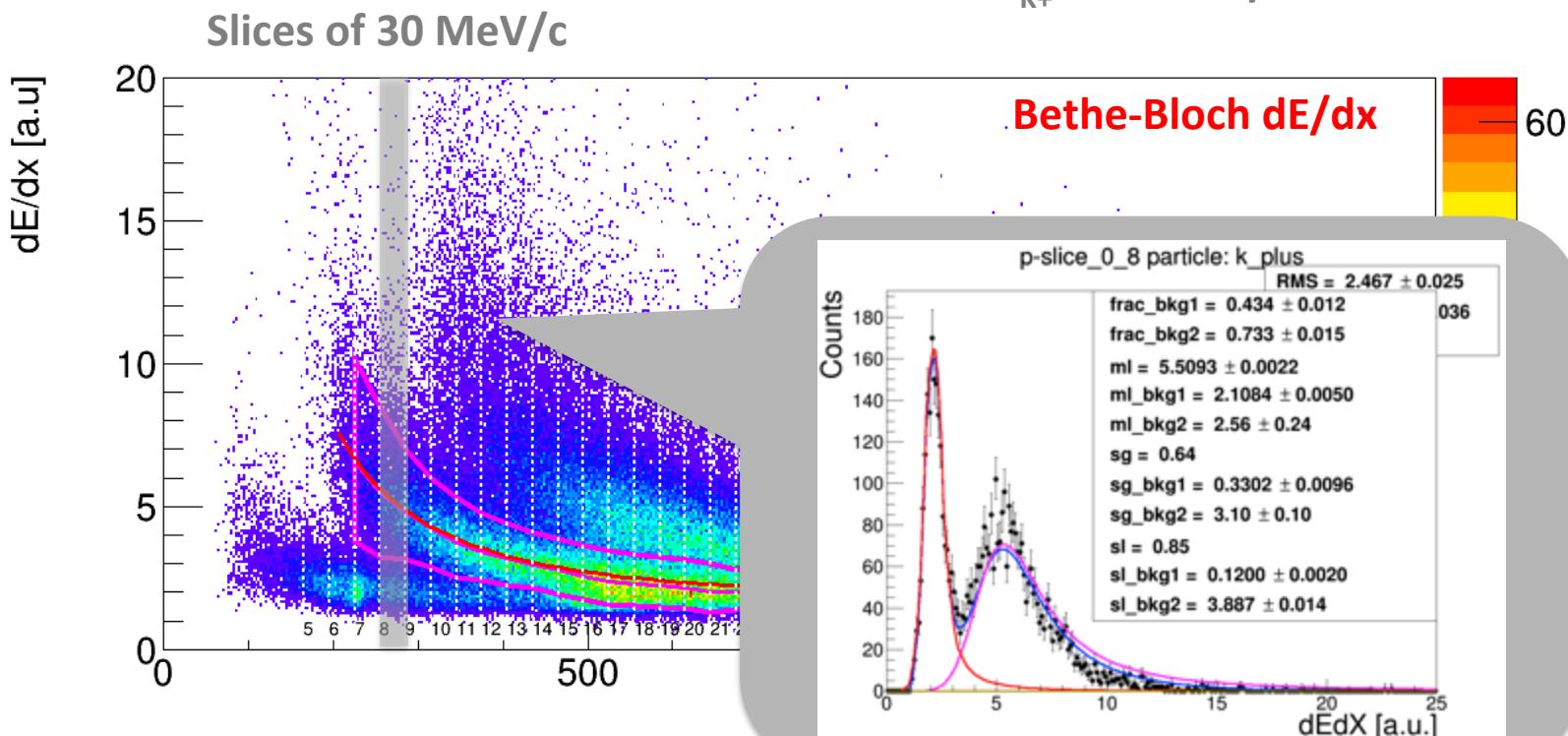
System 0



# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

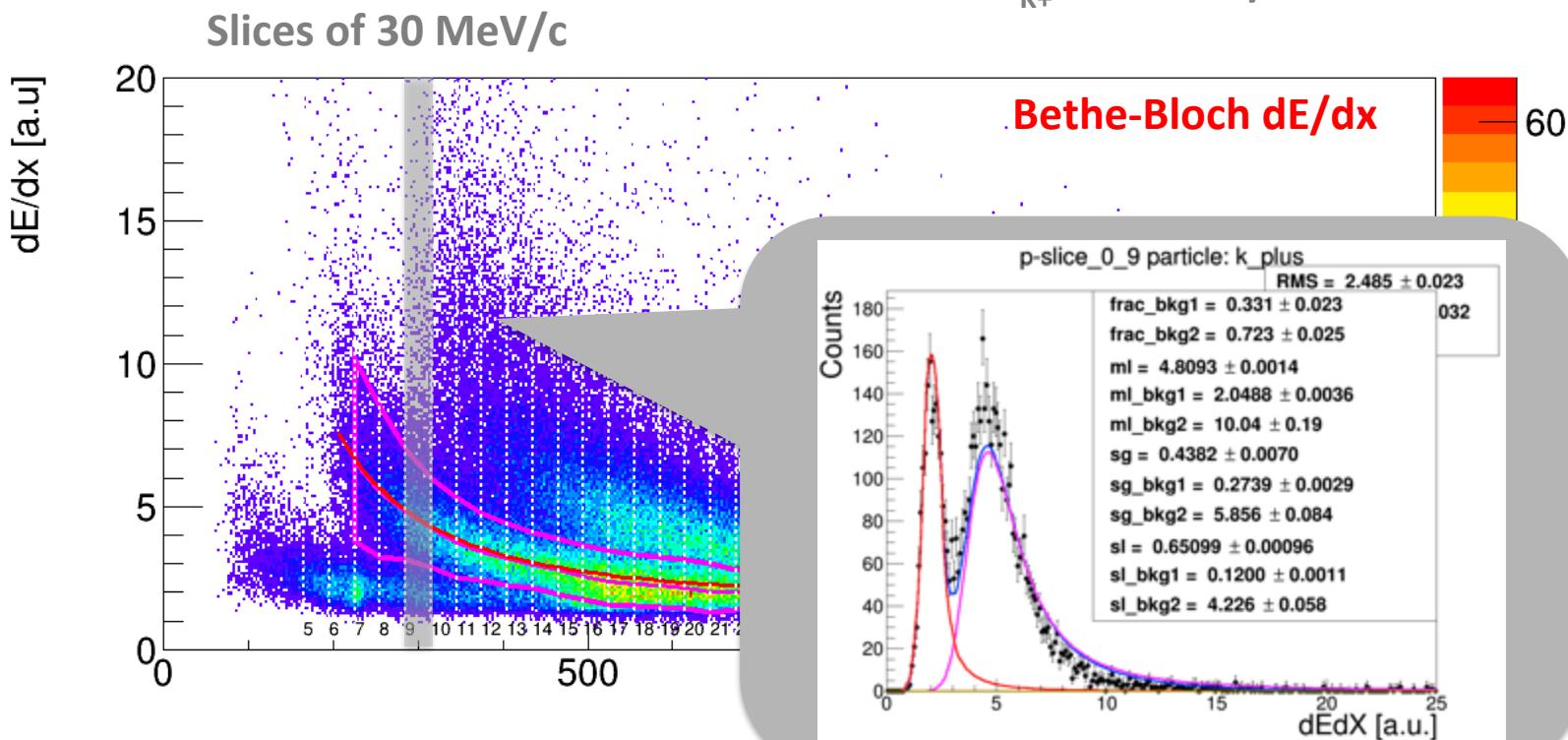


SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

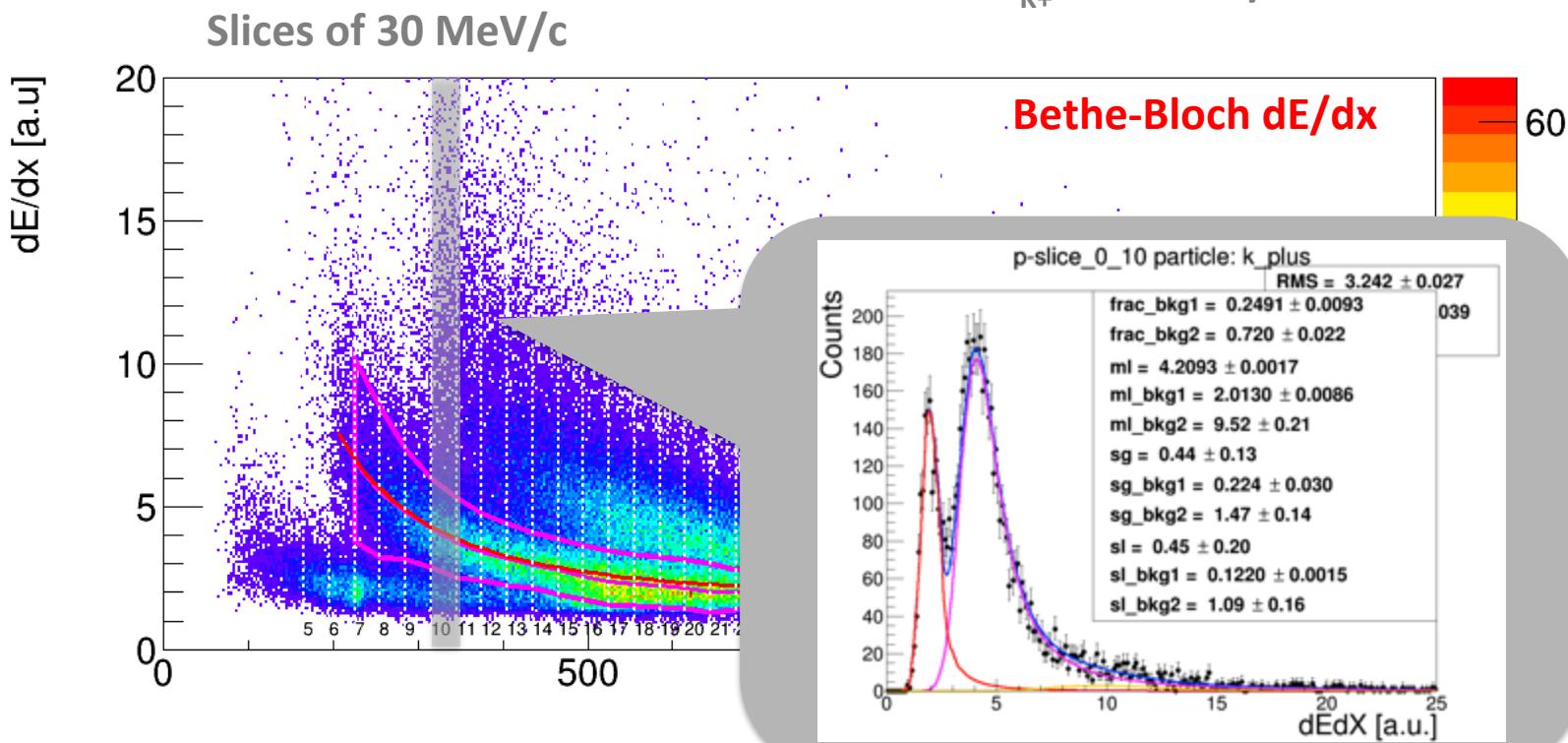


SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

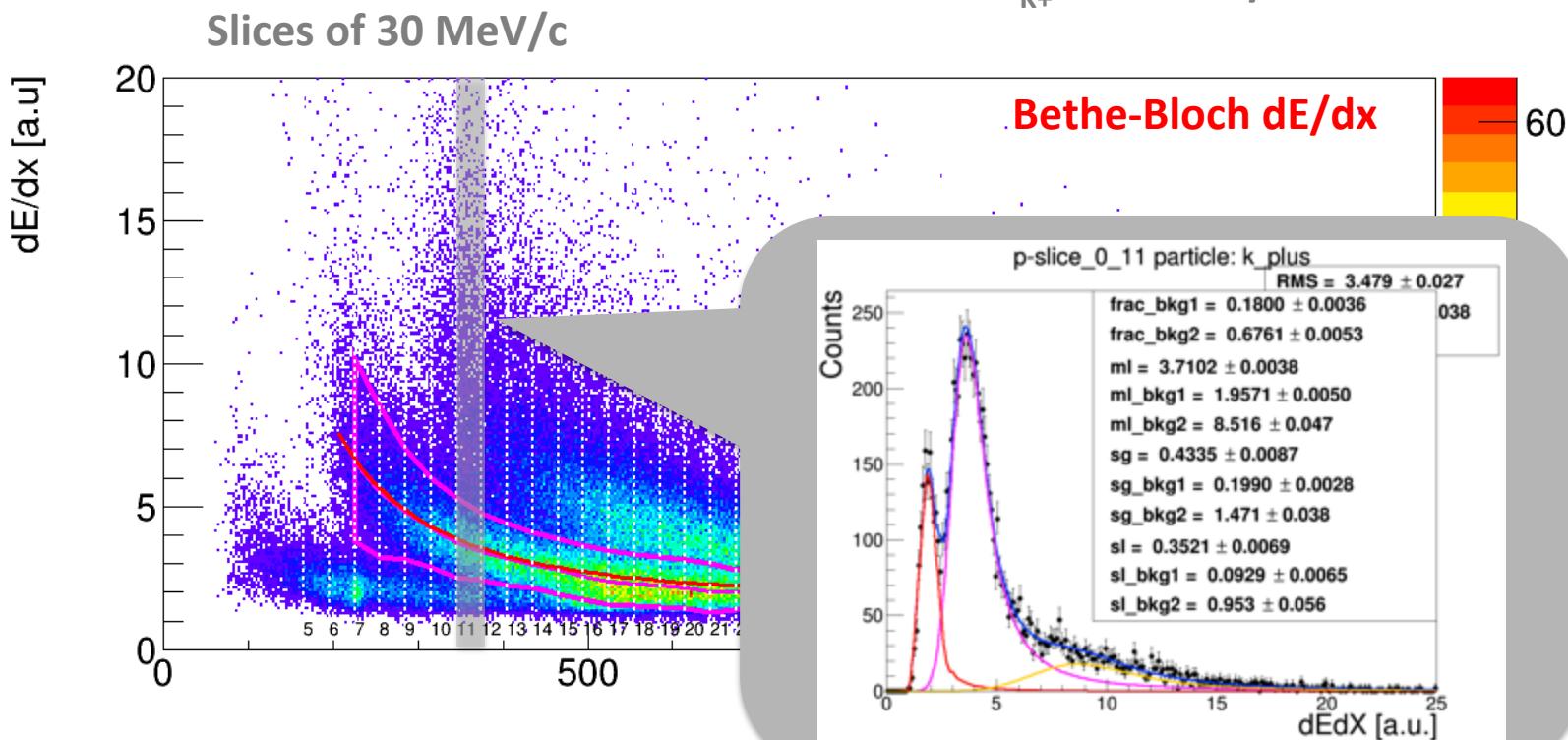


SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

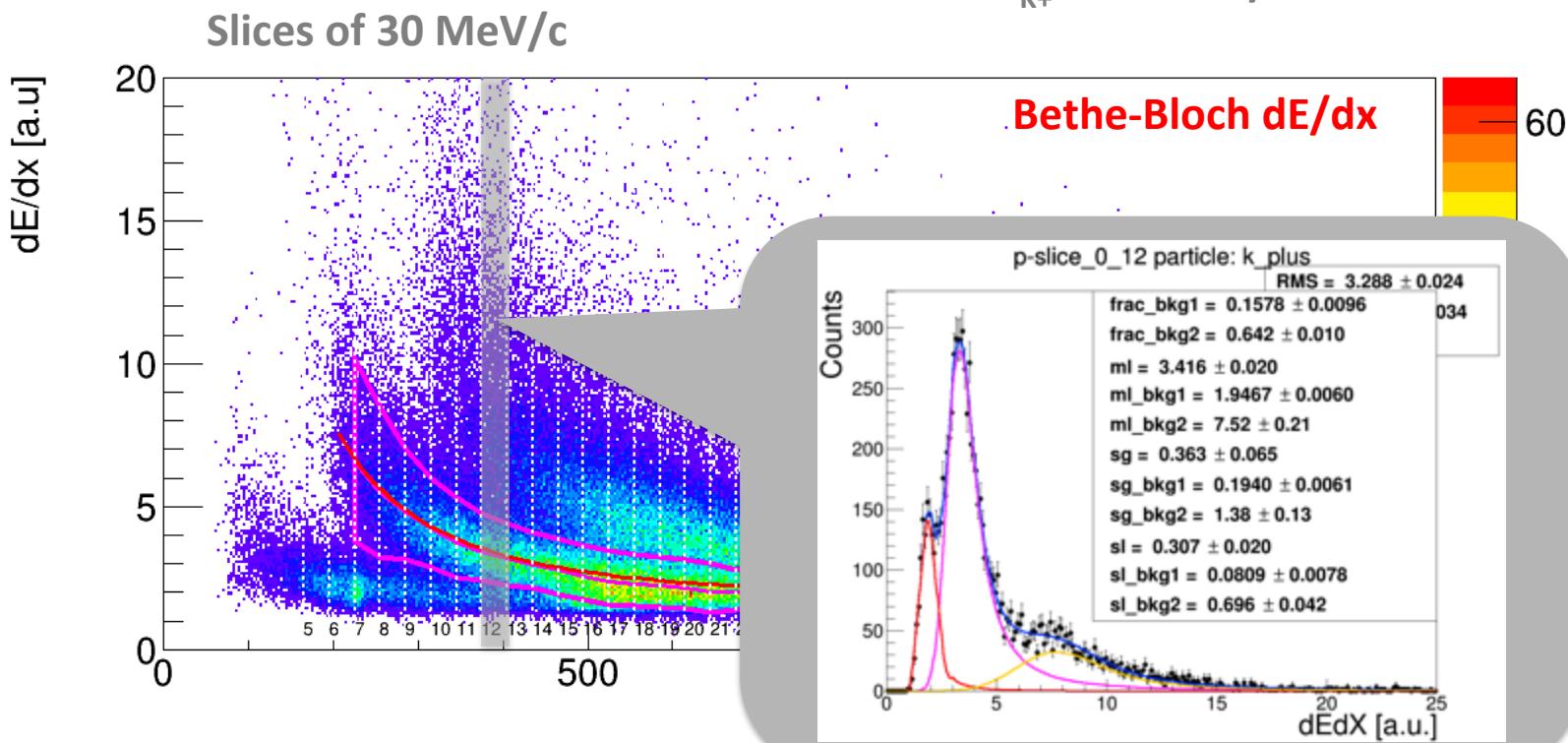


SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

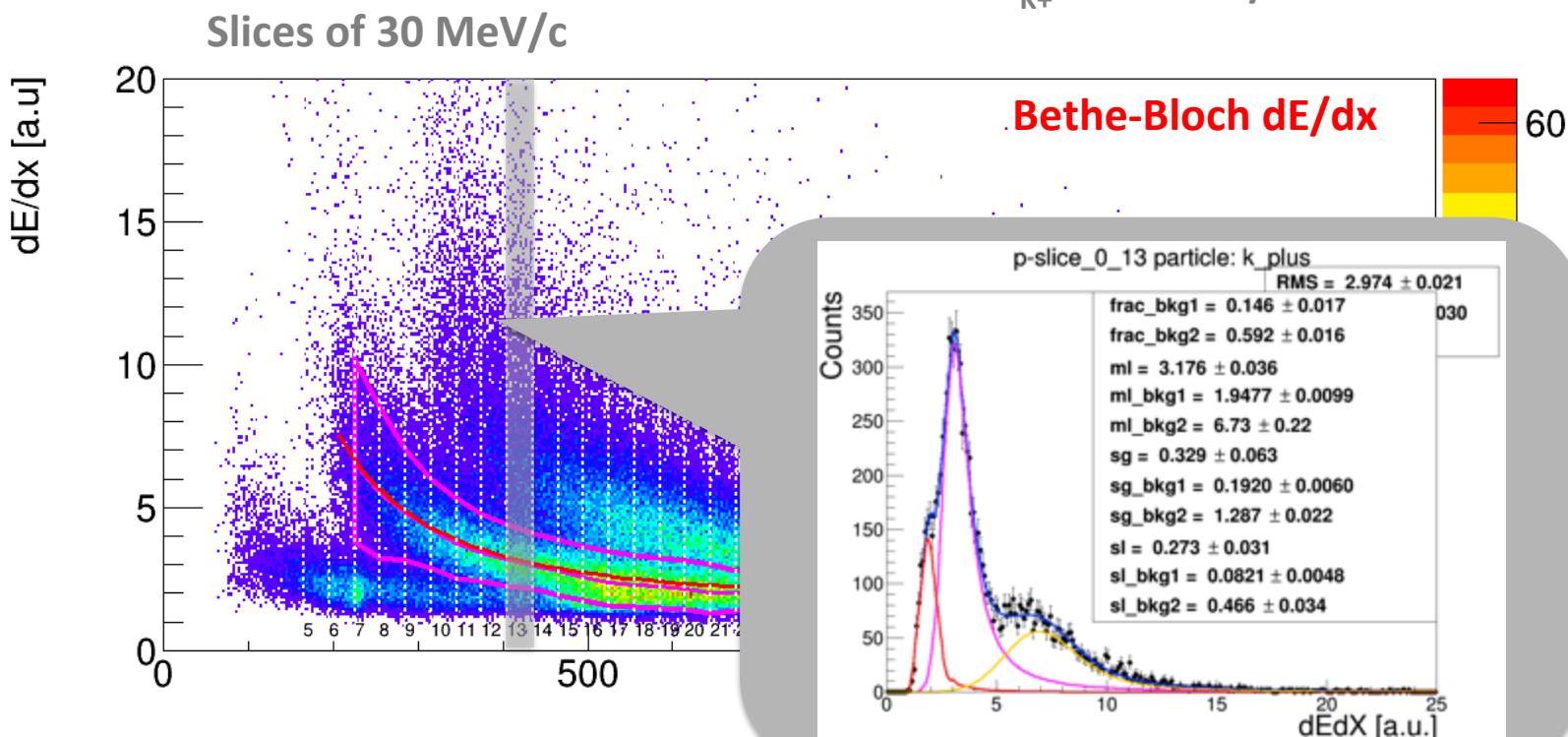
System 0



# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

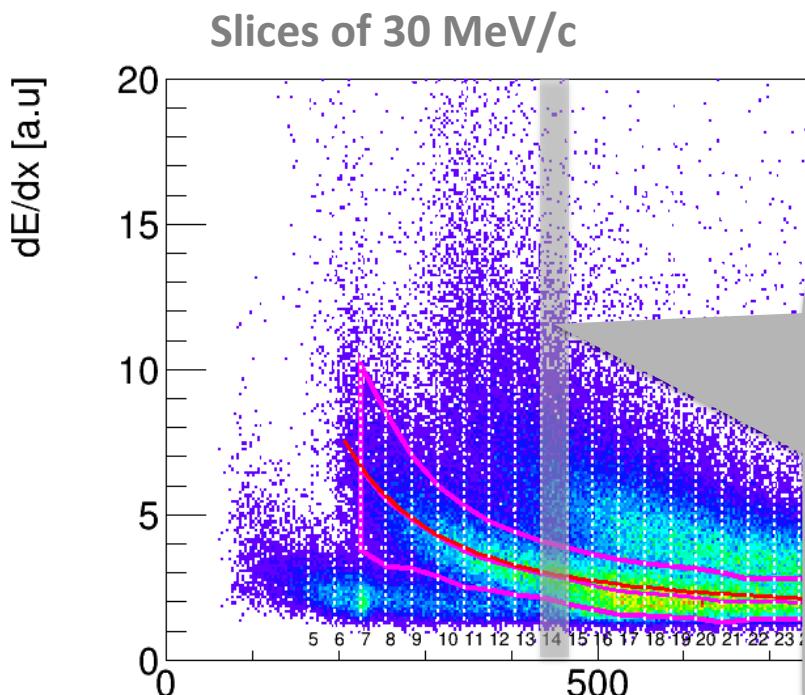


SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

# PID Selection Procedure

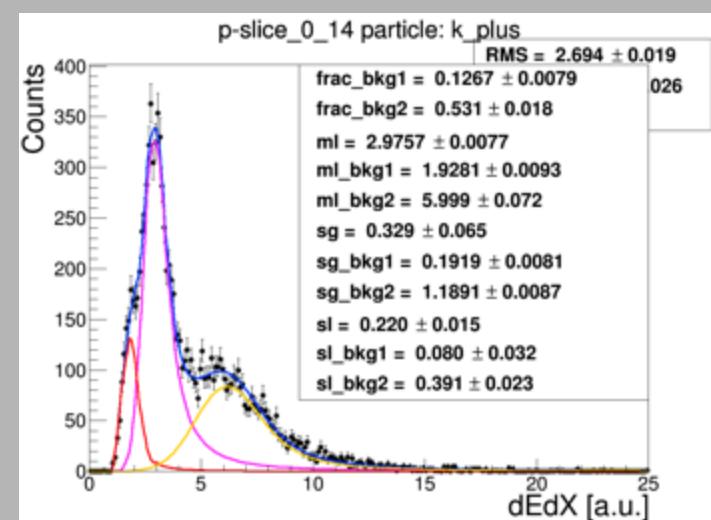
EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

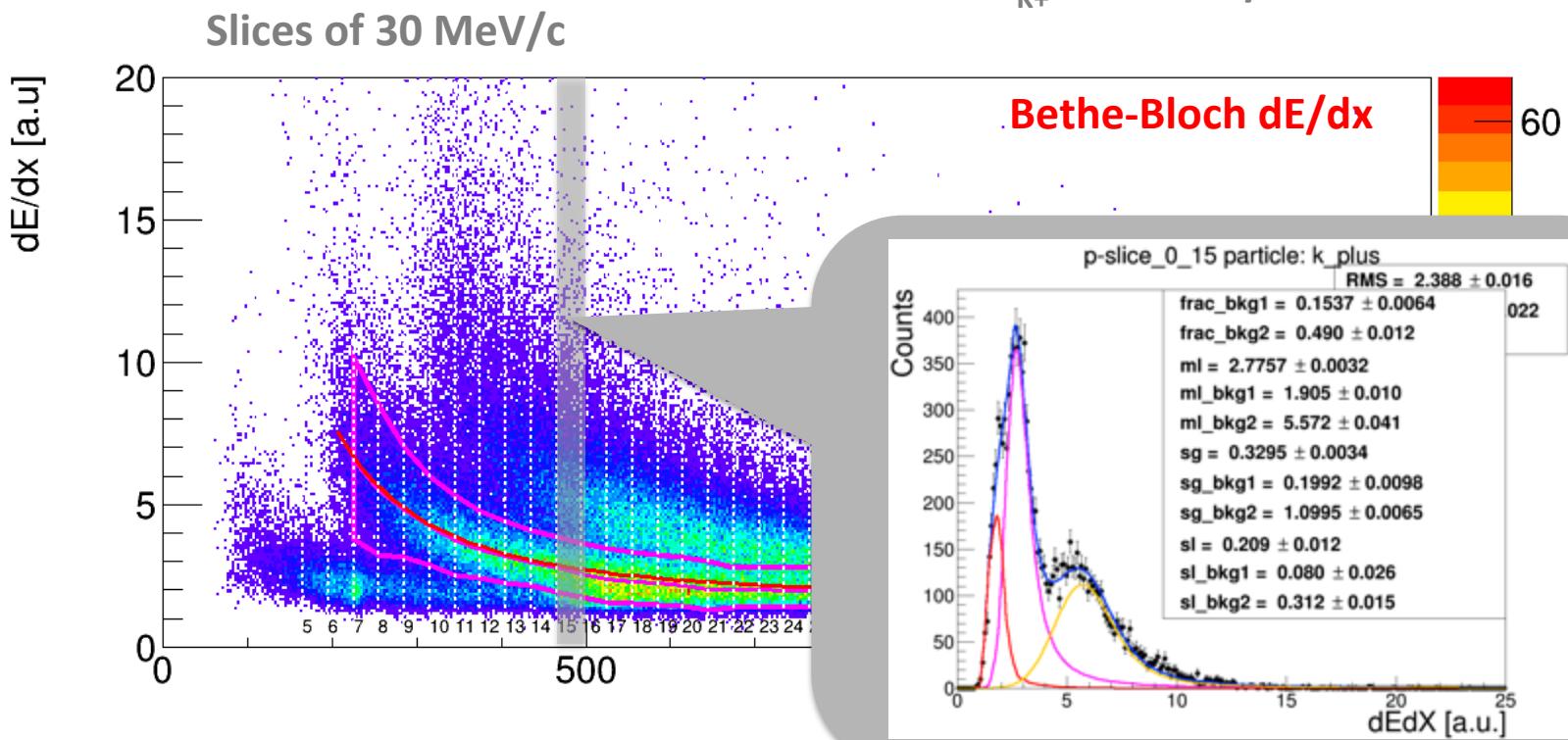
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

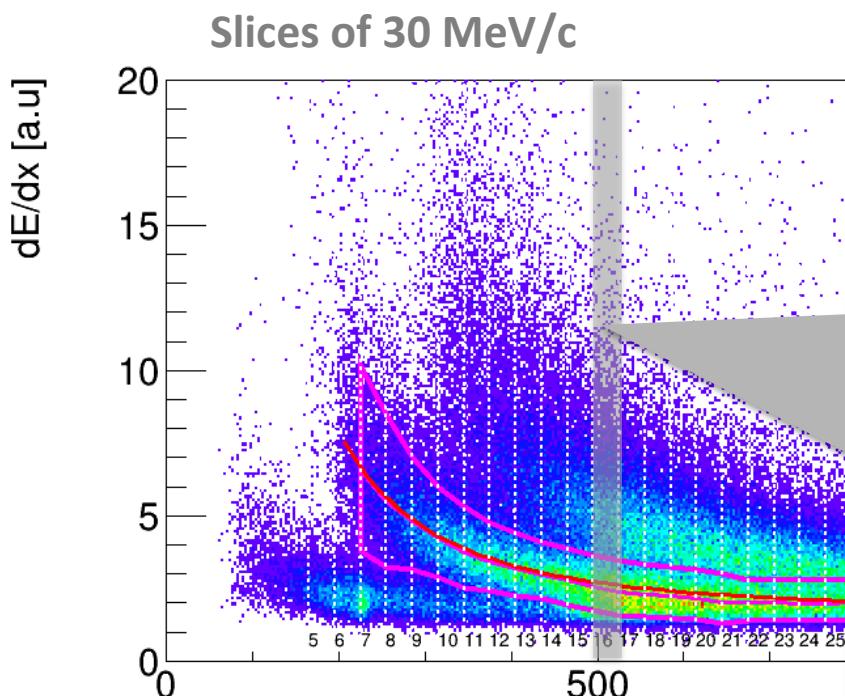
System 0



# PID Selection Procedure

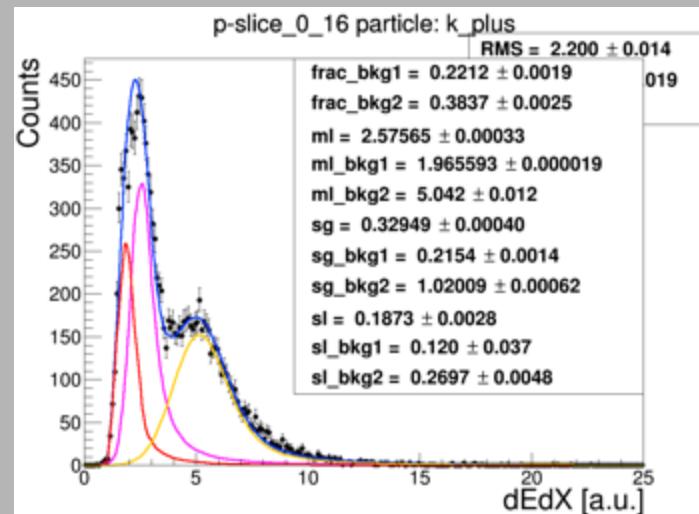
EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

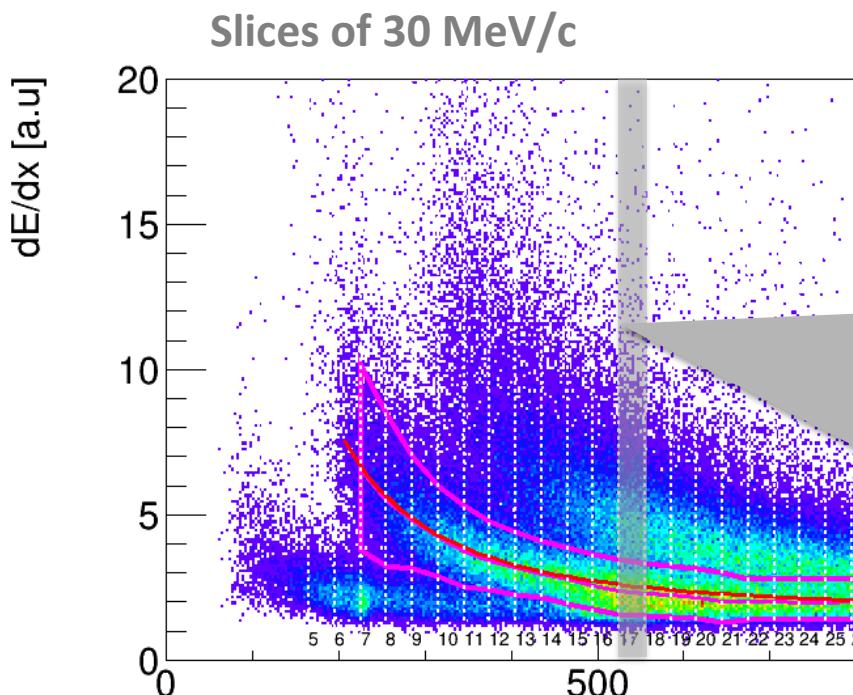
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

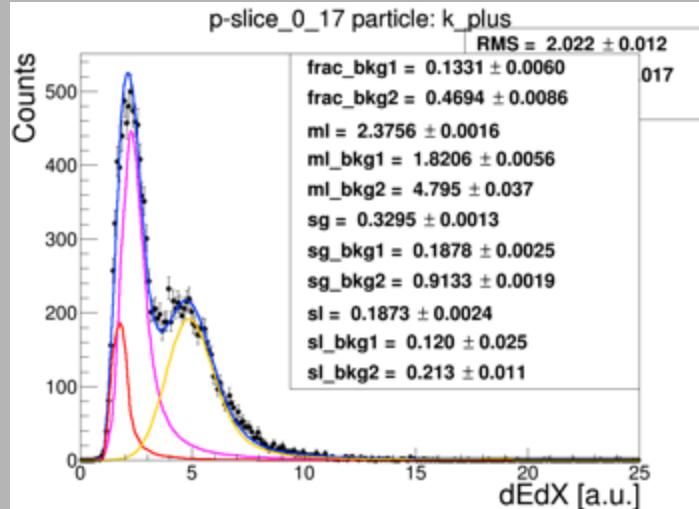
EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

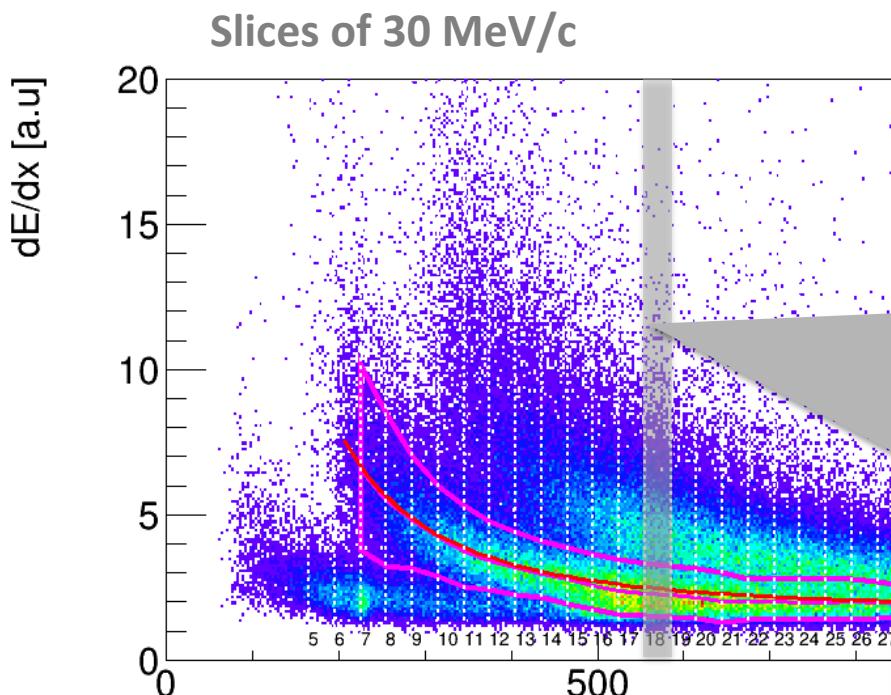
Bethe-Bloch  $dE/dx$



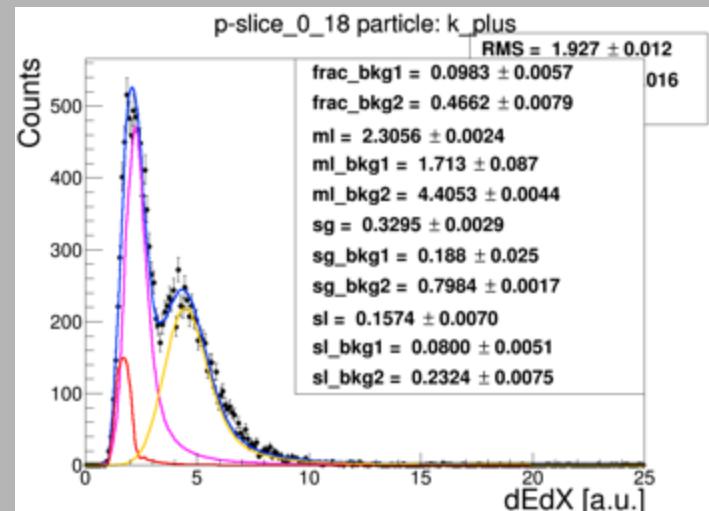
# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0



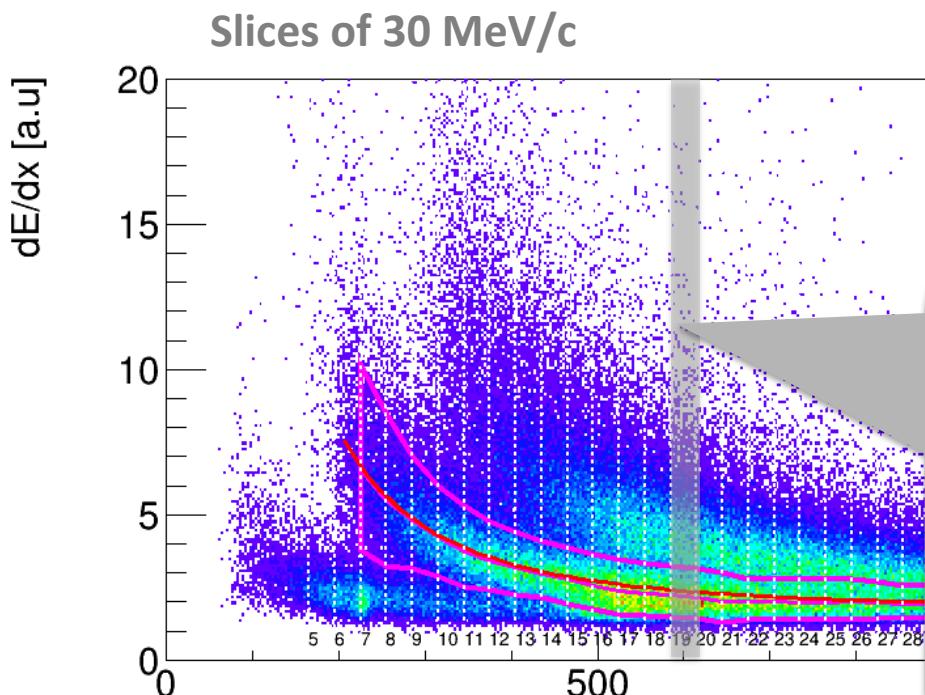
SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$



# PID Selection Procedure

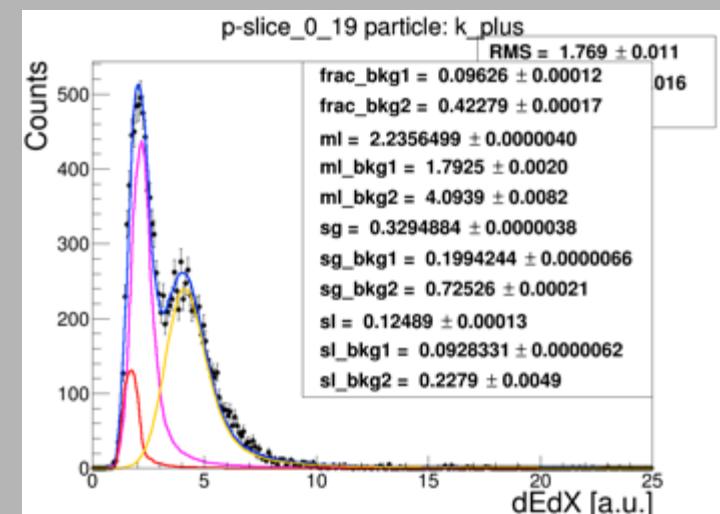
EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

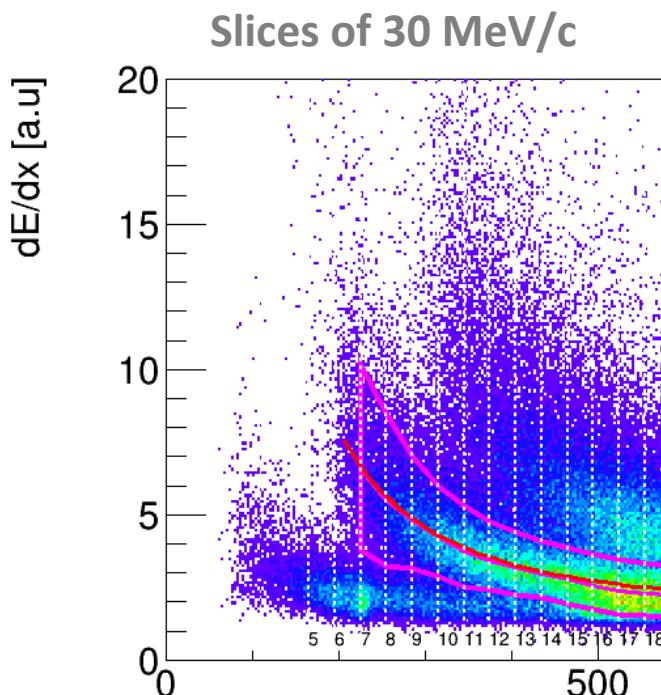
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

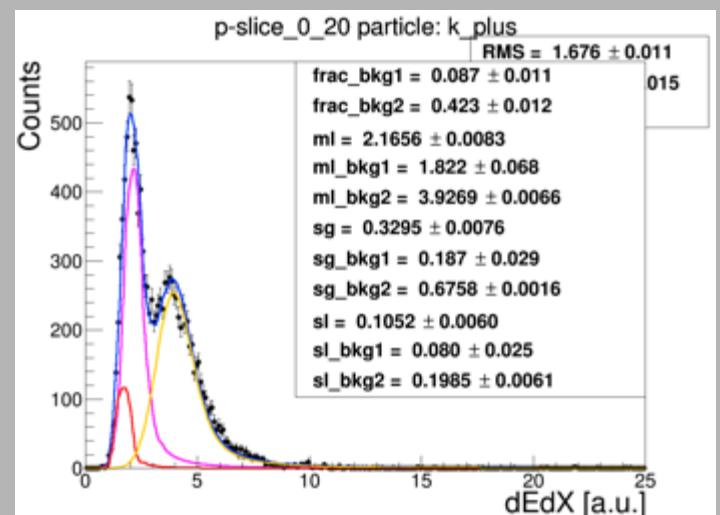
EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

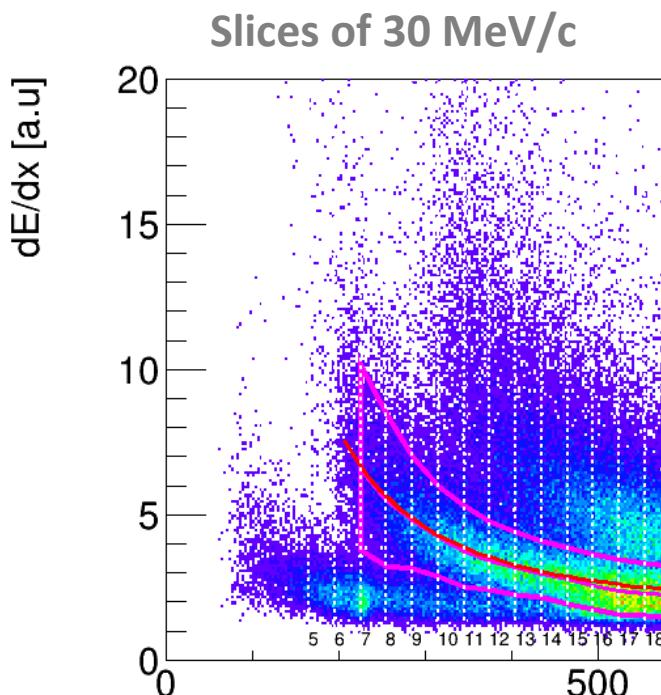
Bethe-Bloch dE/dx



# PID Selection Procedure

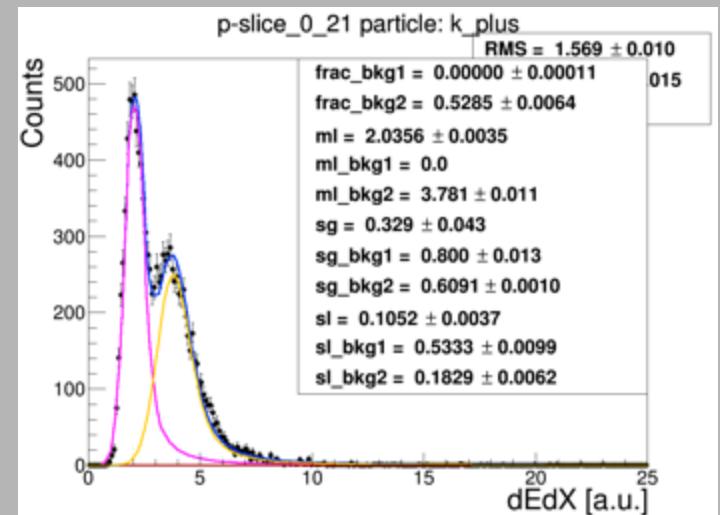
EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

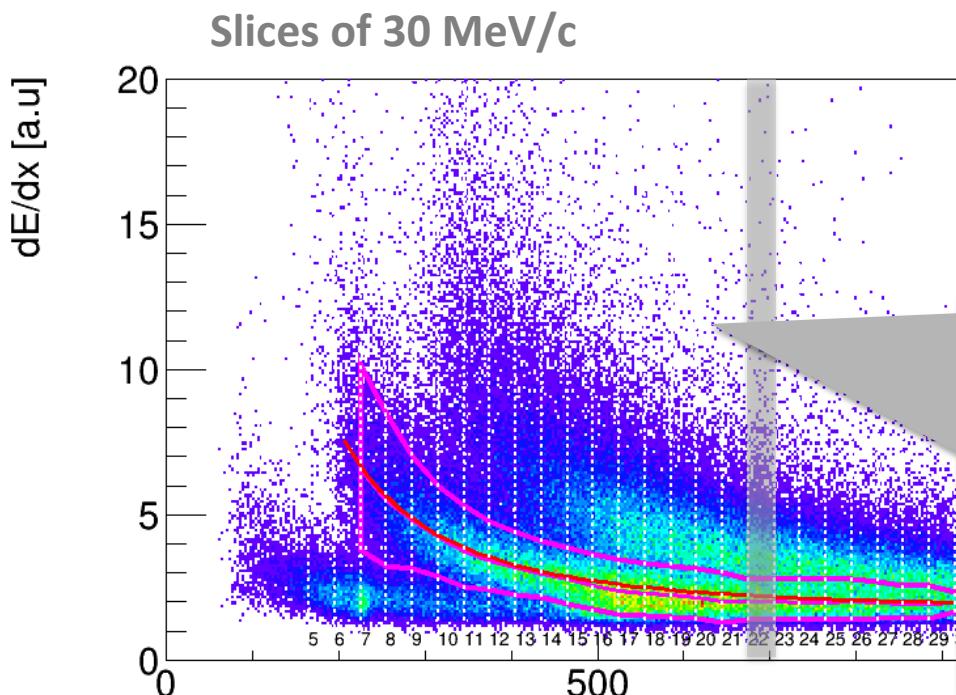
Bethe-Bloch dE/dx



# PID Selection Procedure

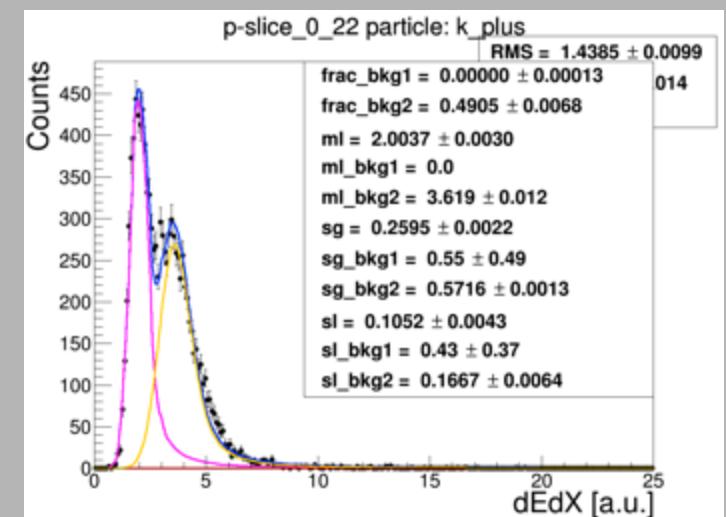
EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

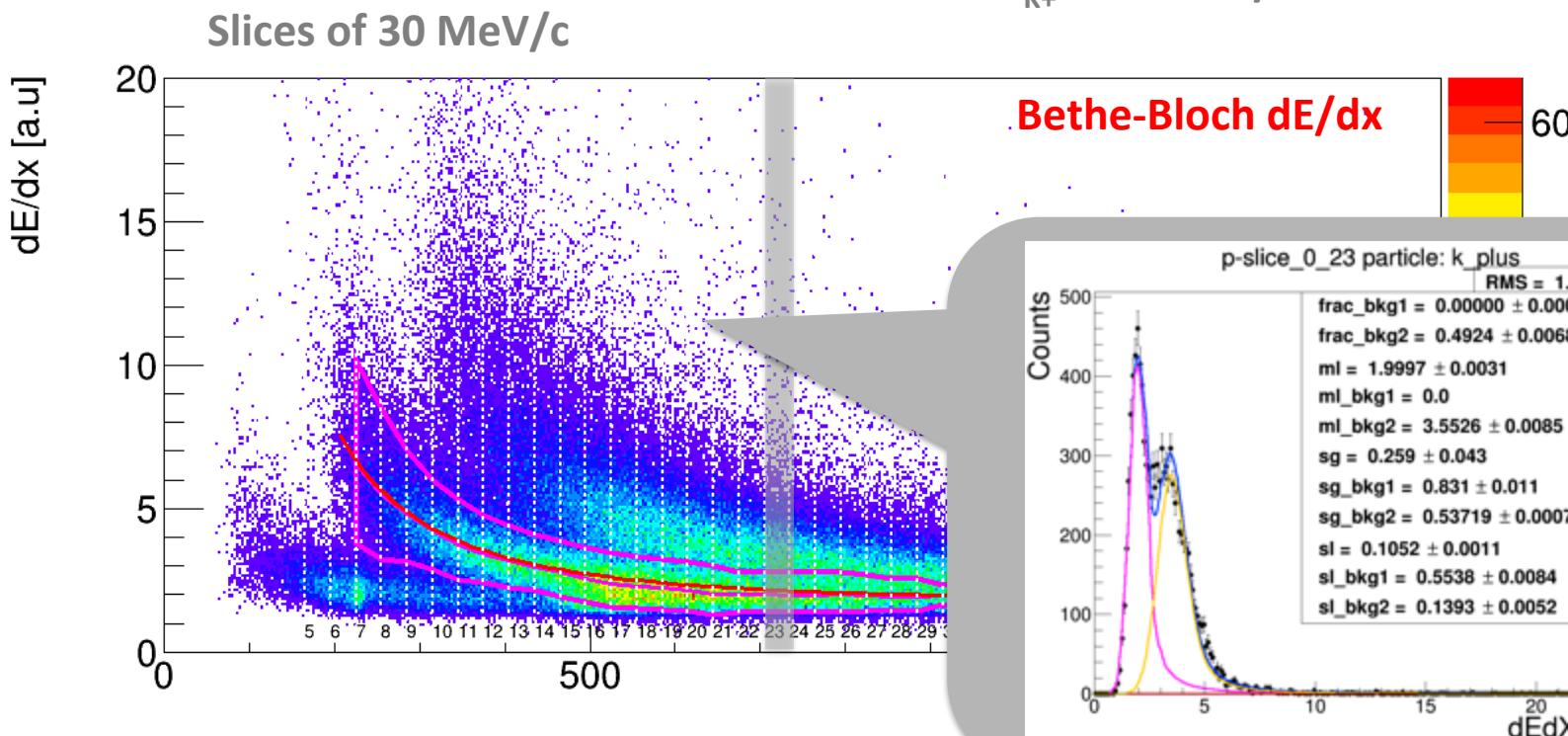
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

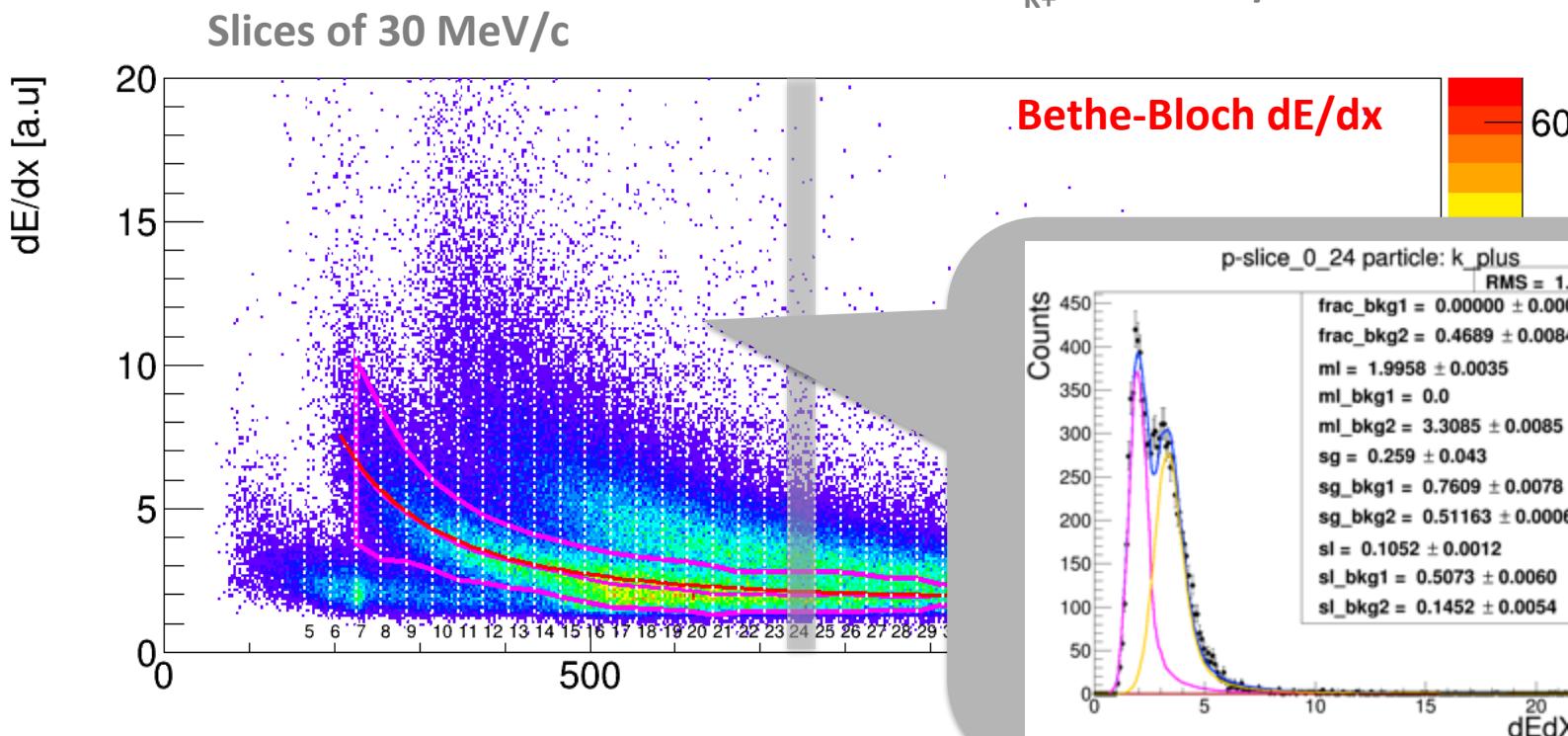
System 0



# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

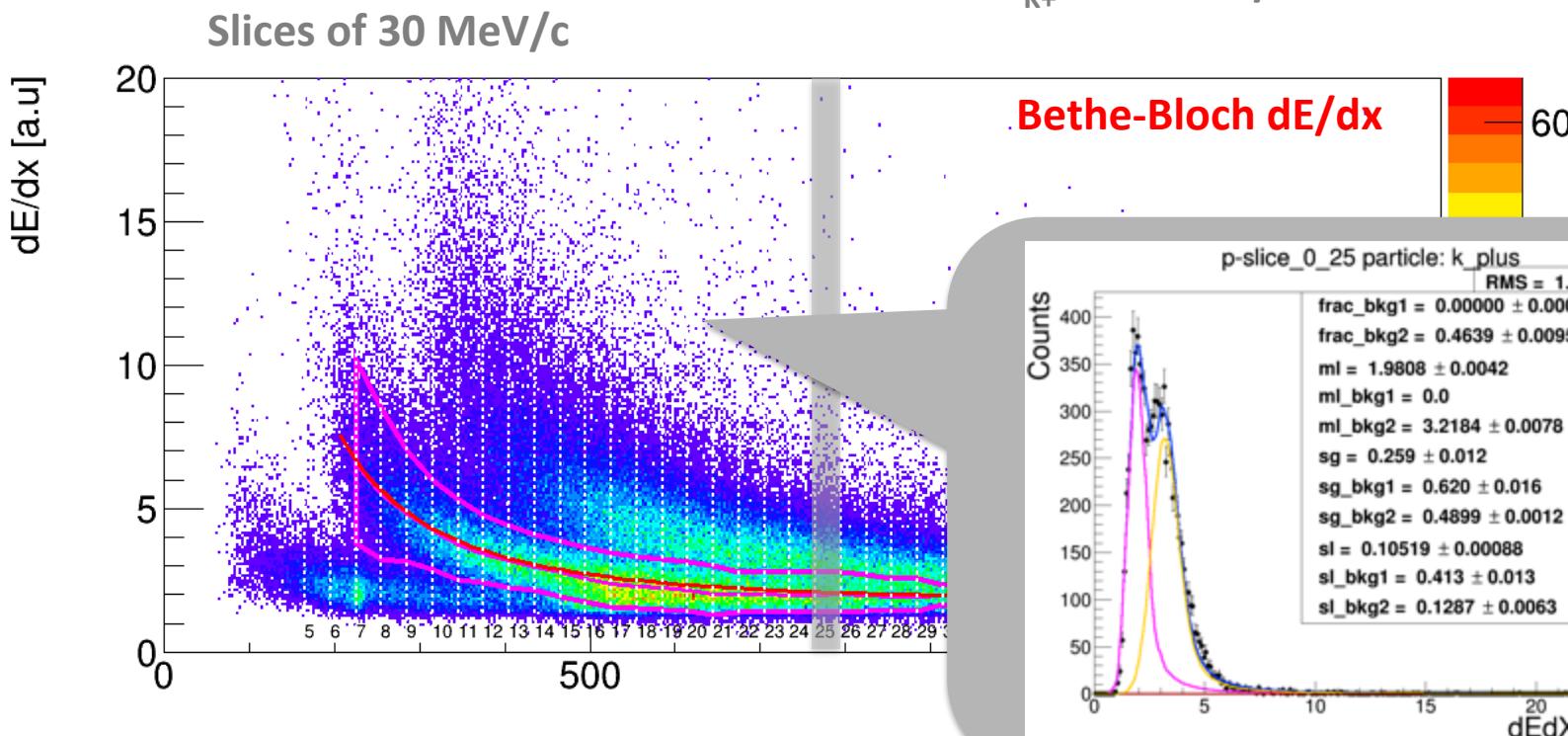
System 0



# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

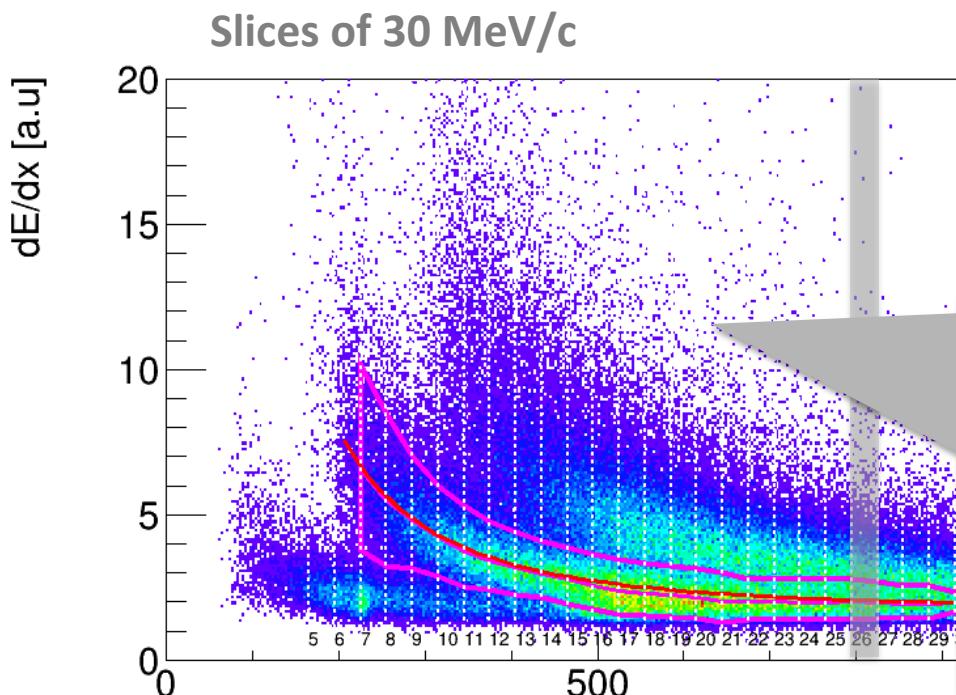


SELECTION of Kaons:  
 $M_{K^+} \pm 50 \text{ MeV}/c^2$

# PID Selection Procedure

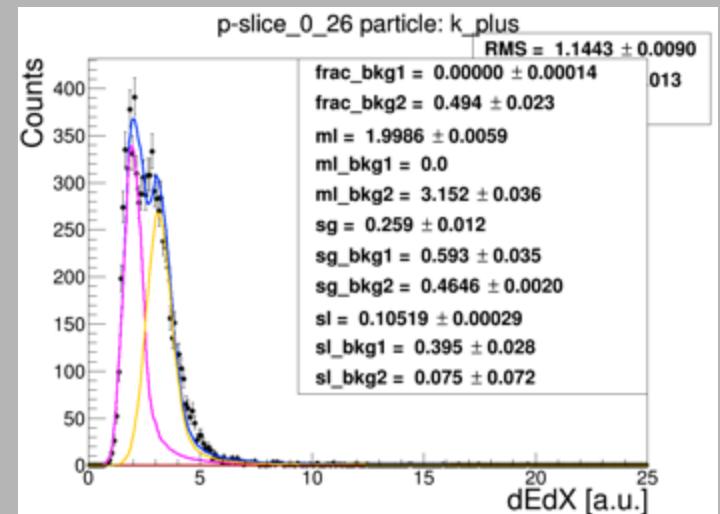
EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K^+} \pm 50 \text{ MeV}/c^2$

Bethe-Bloch dE/dx

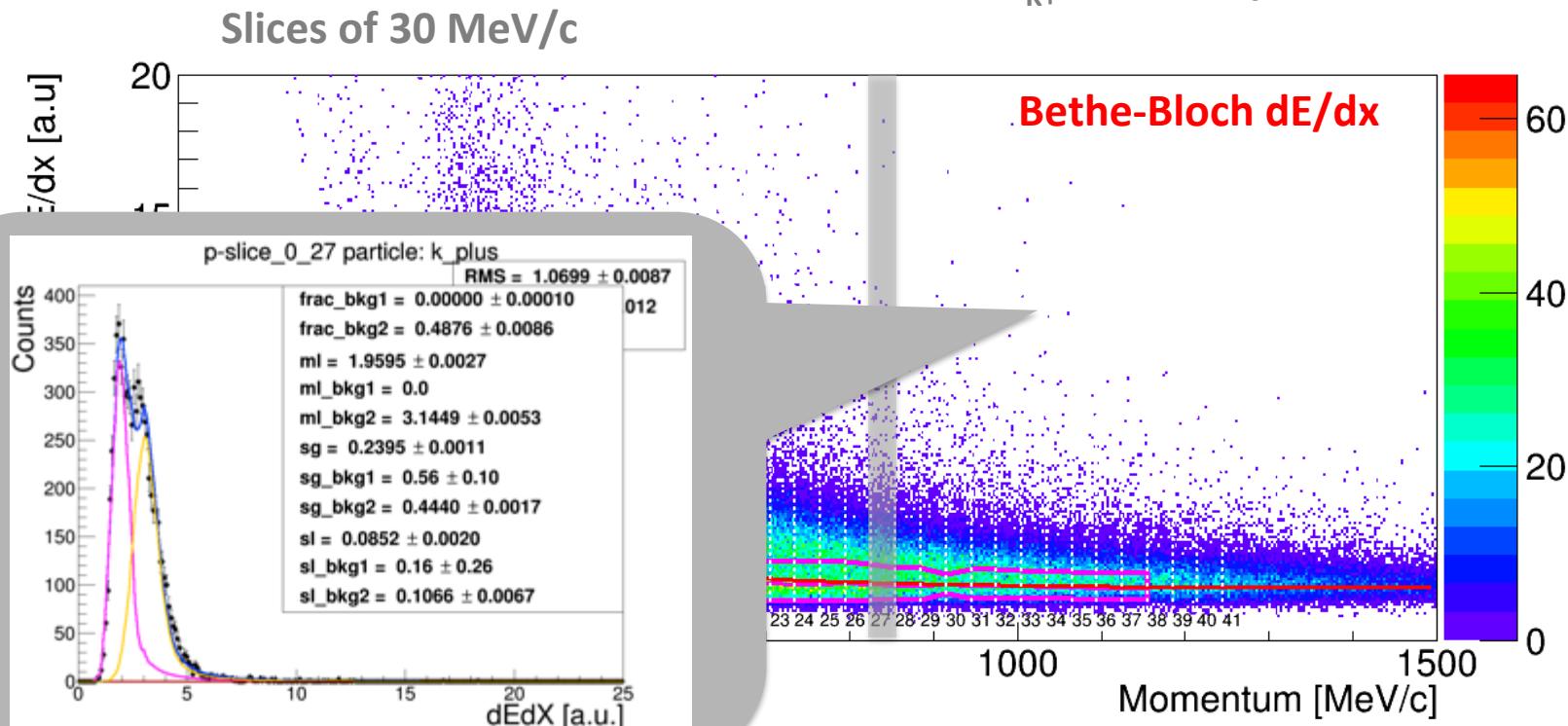


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

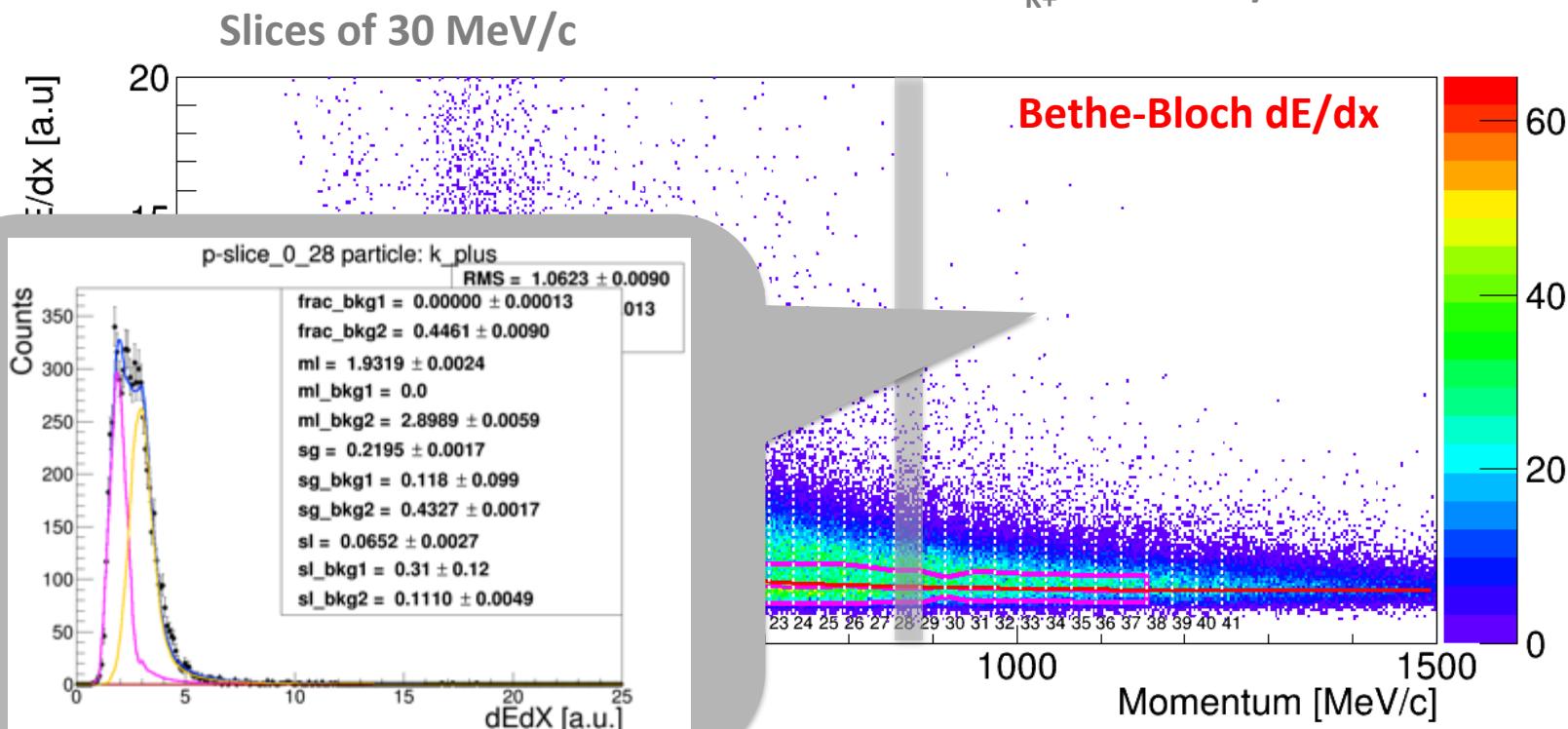


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

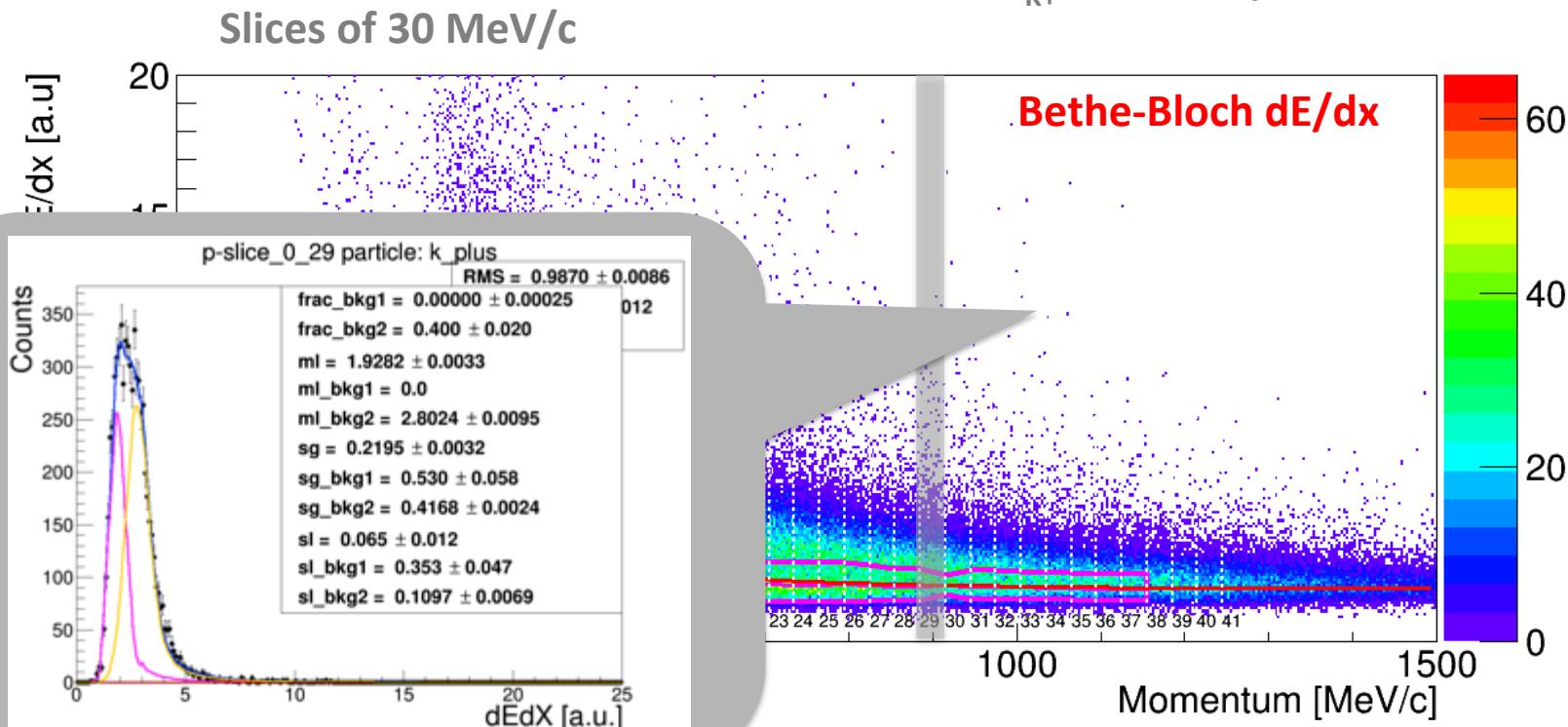


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

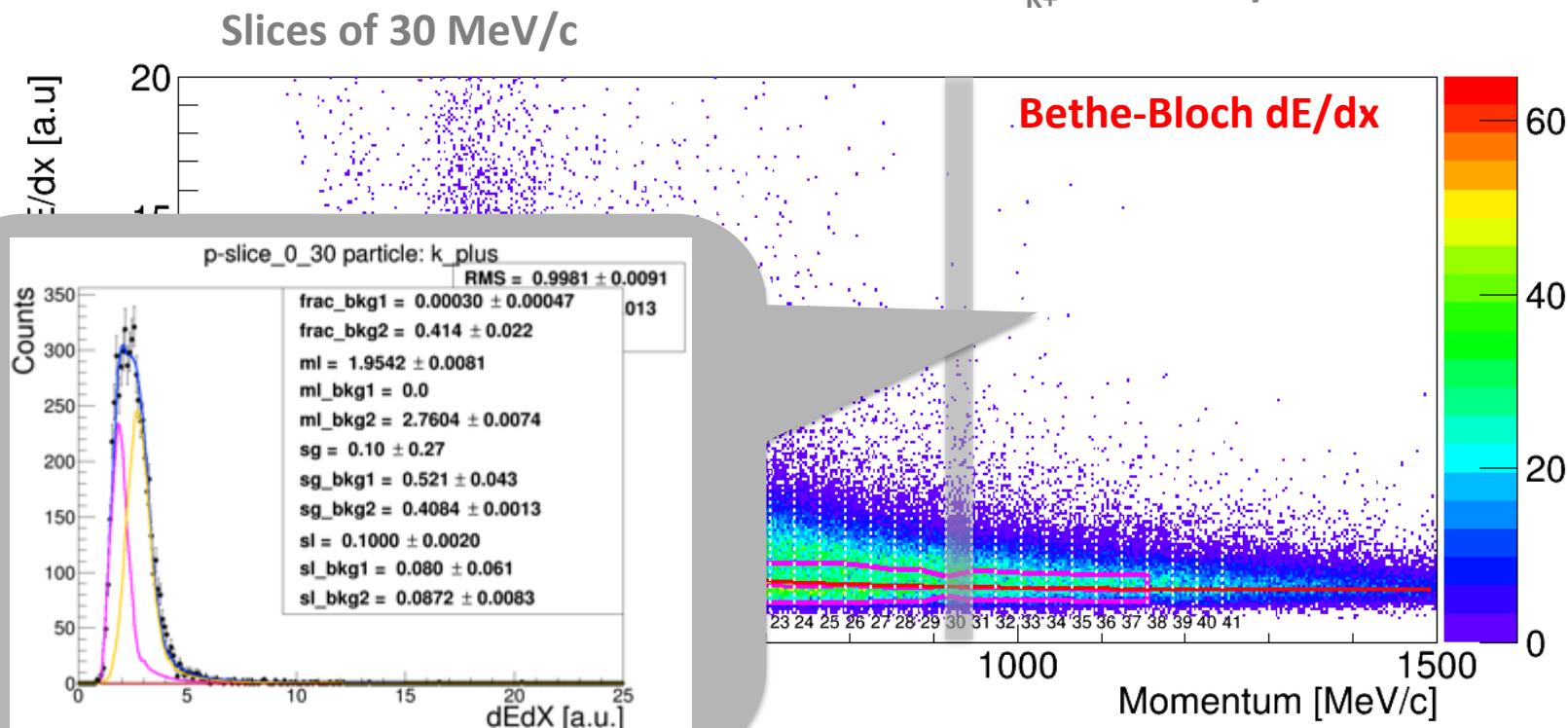


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

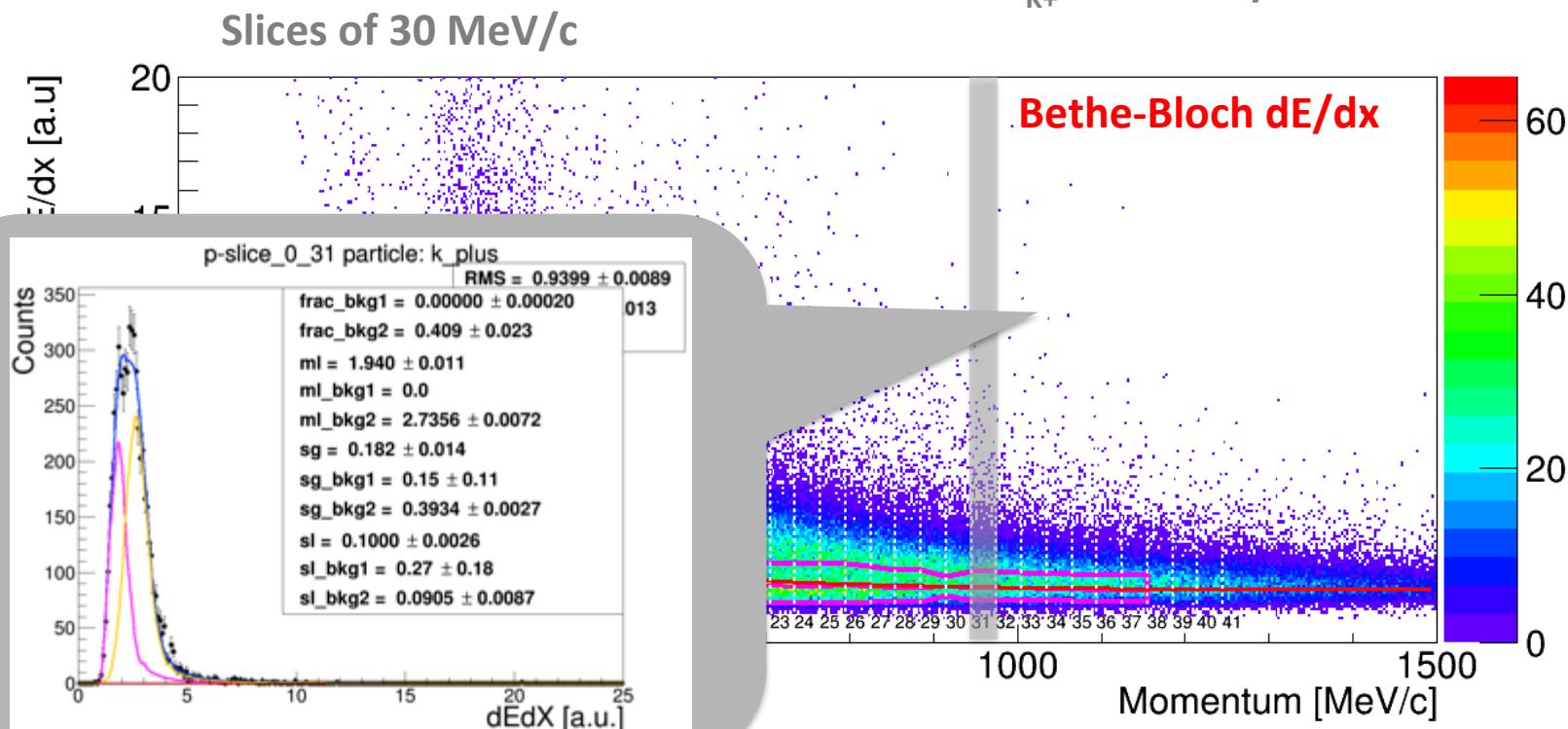


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

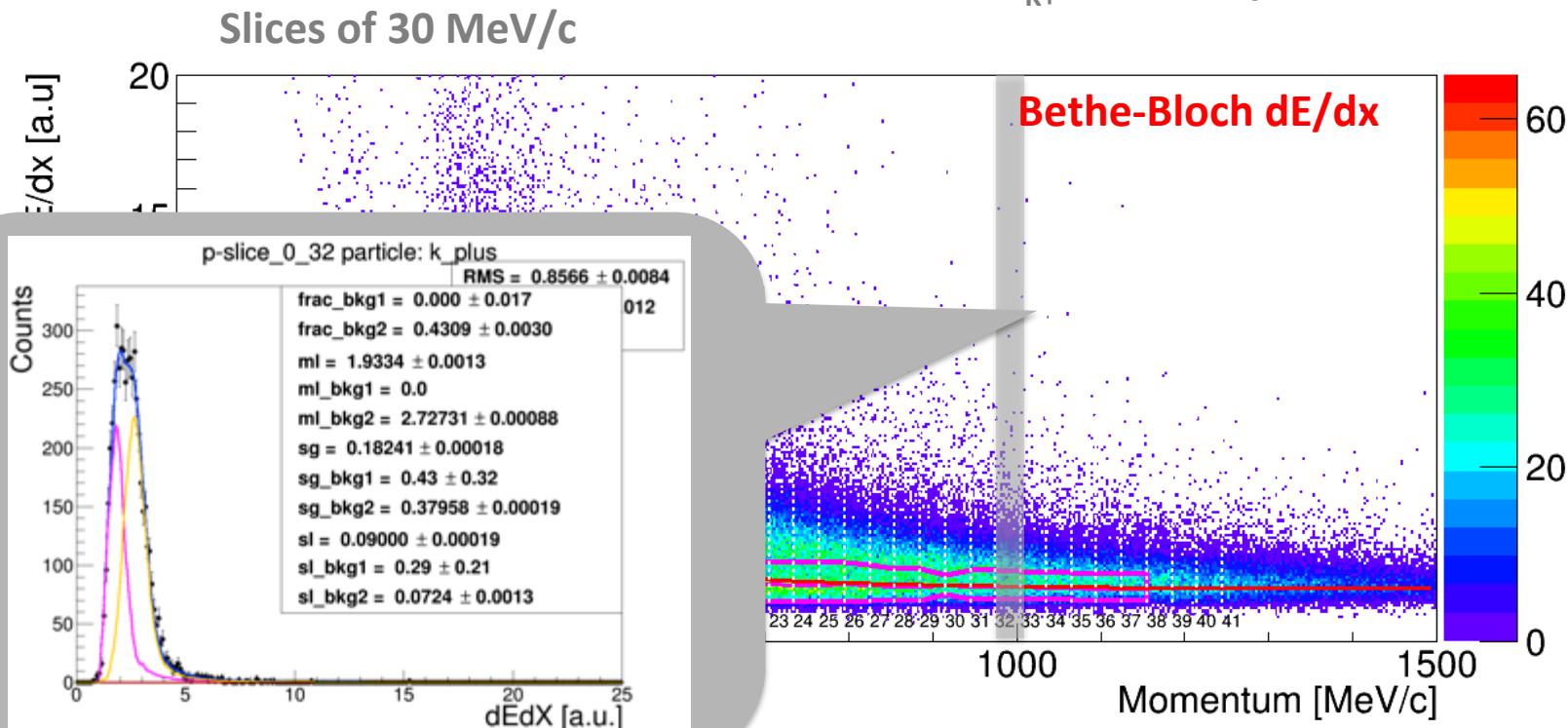


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

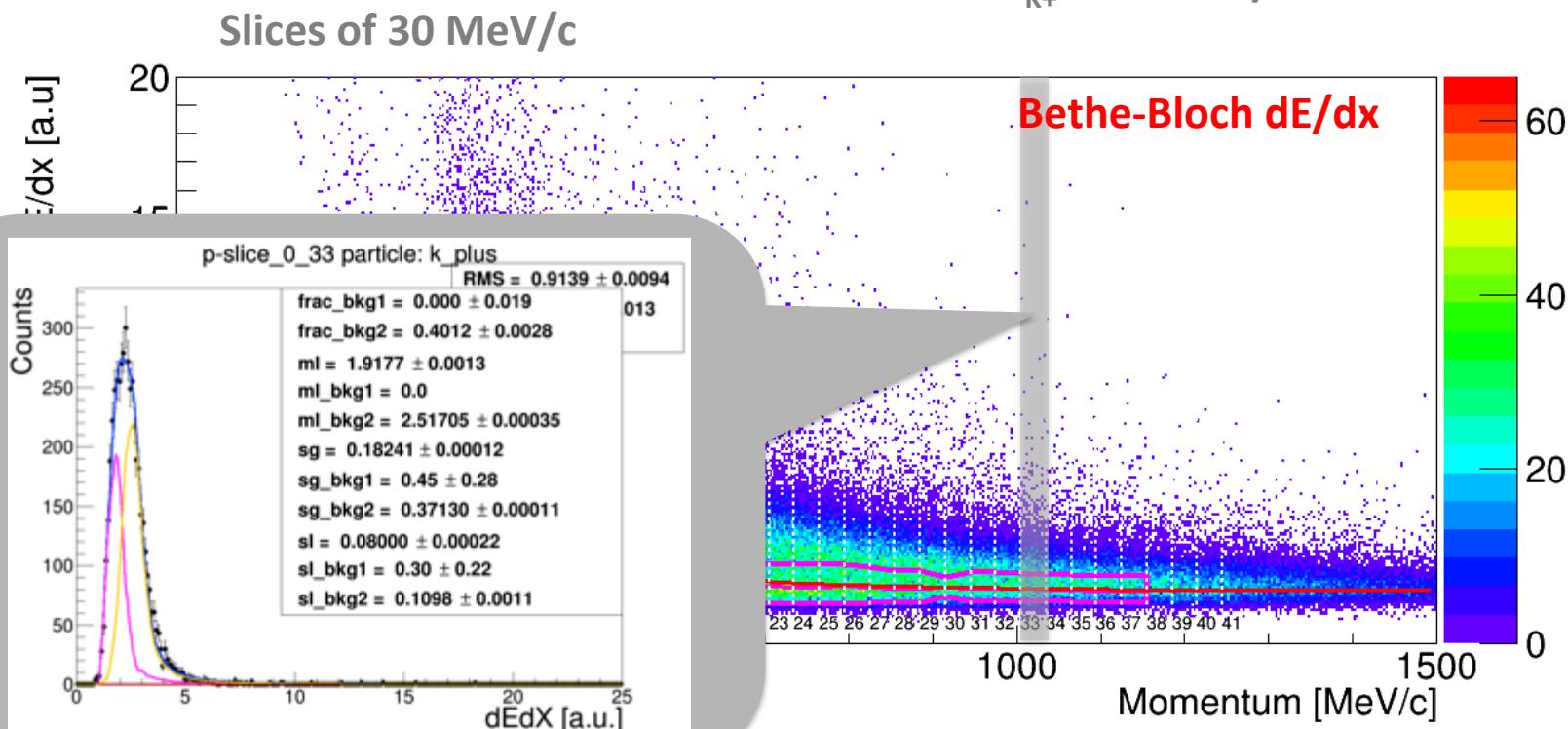


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

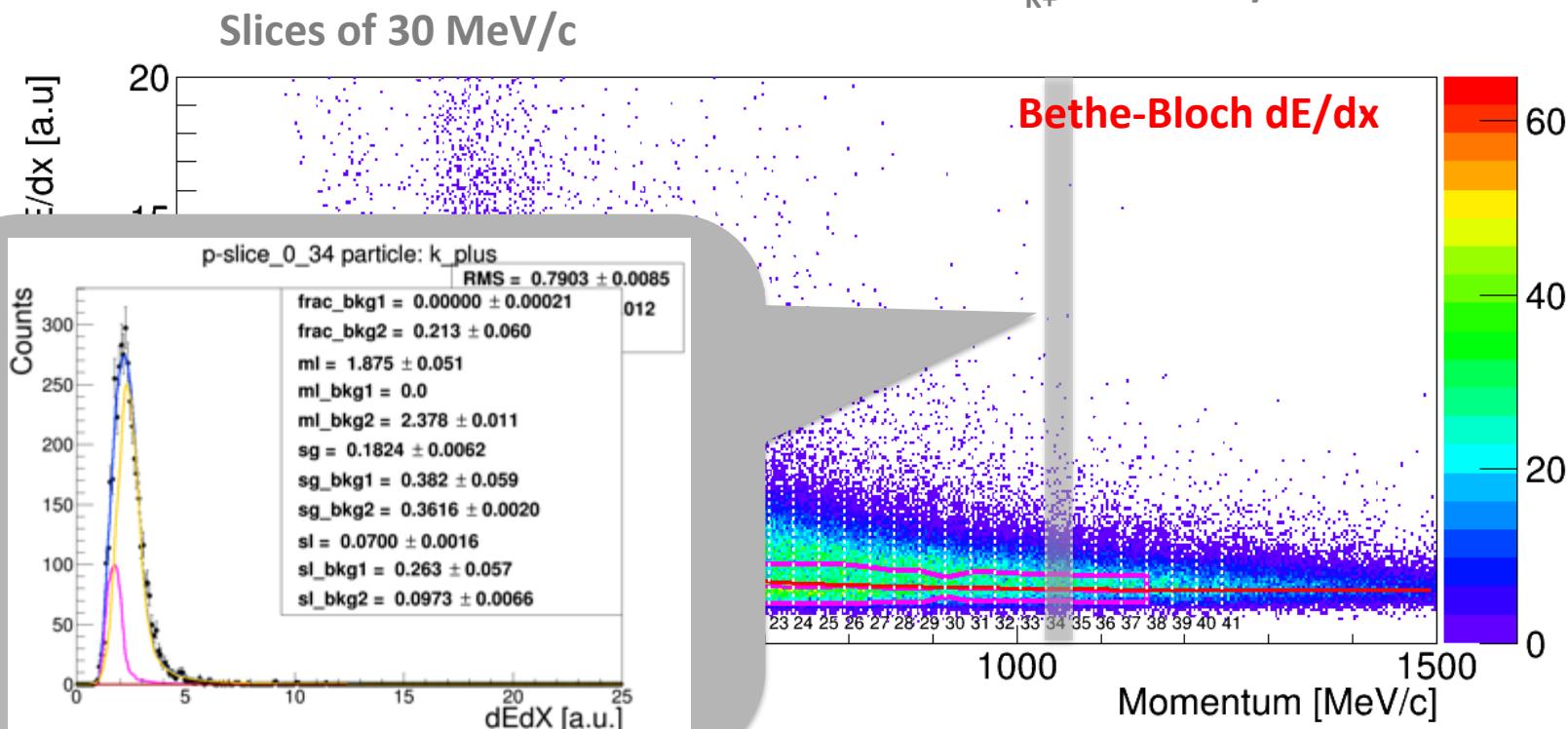


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

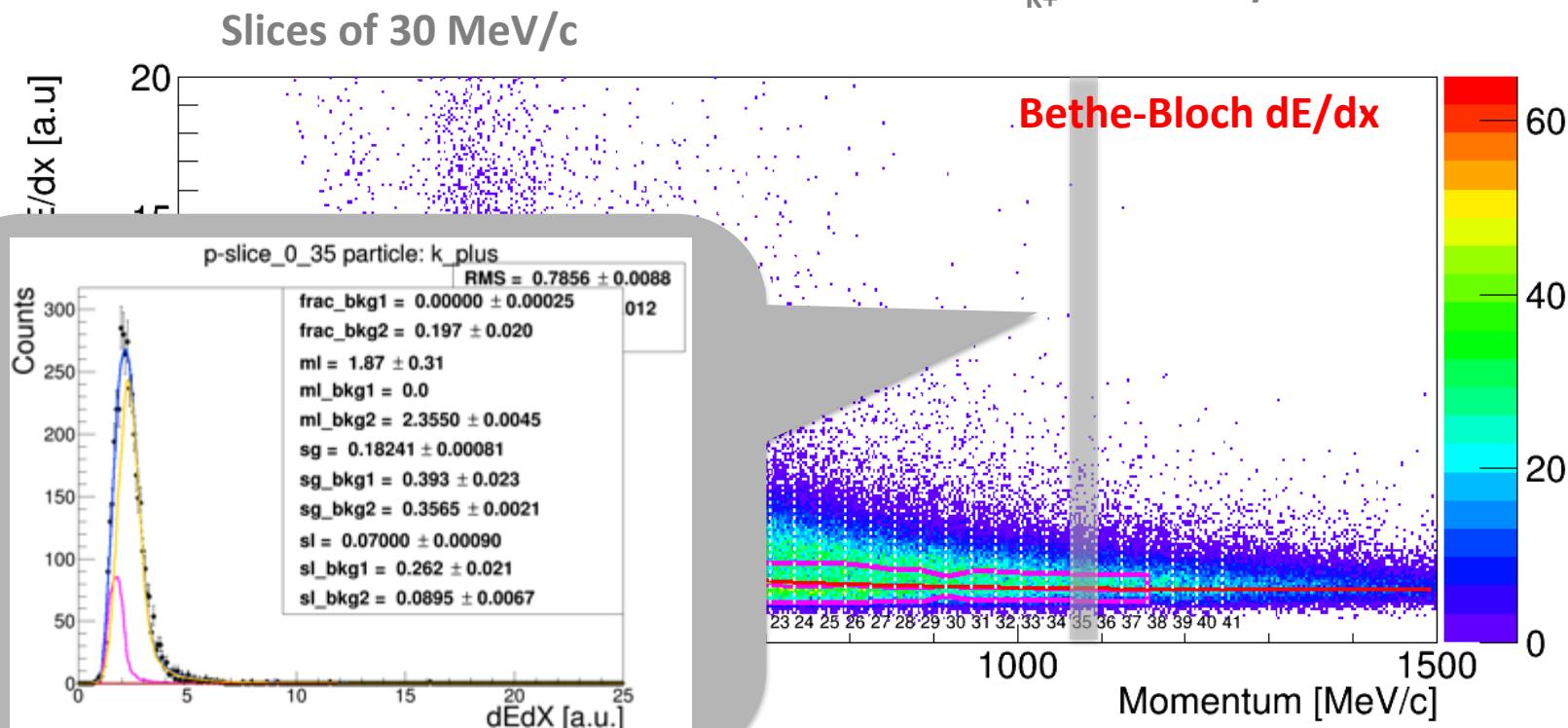


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

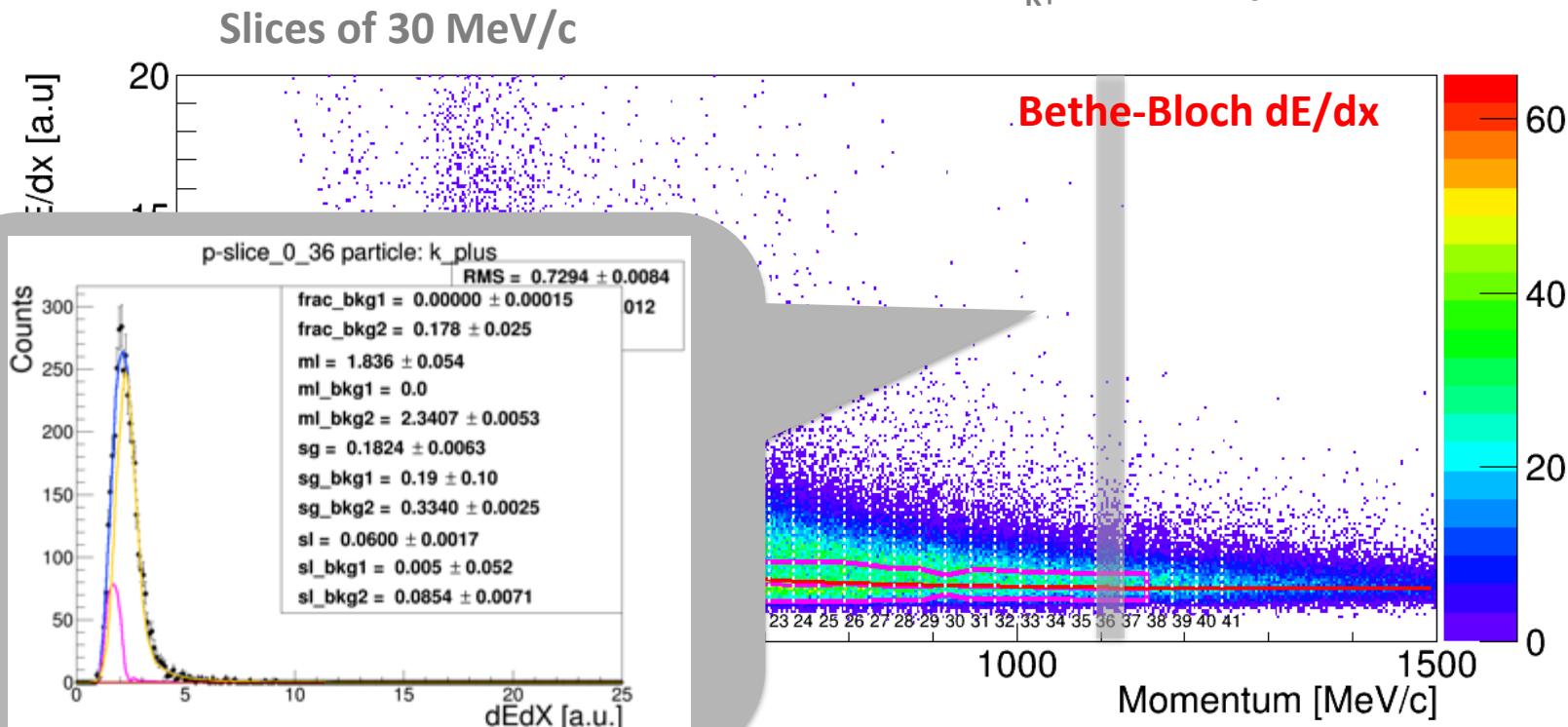


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

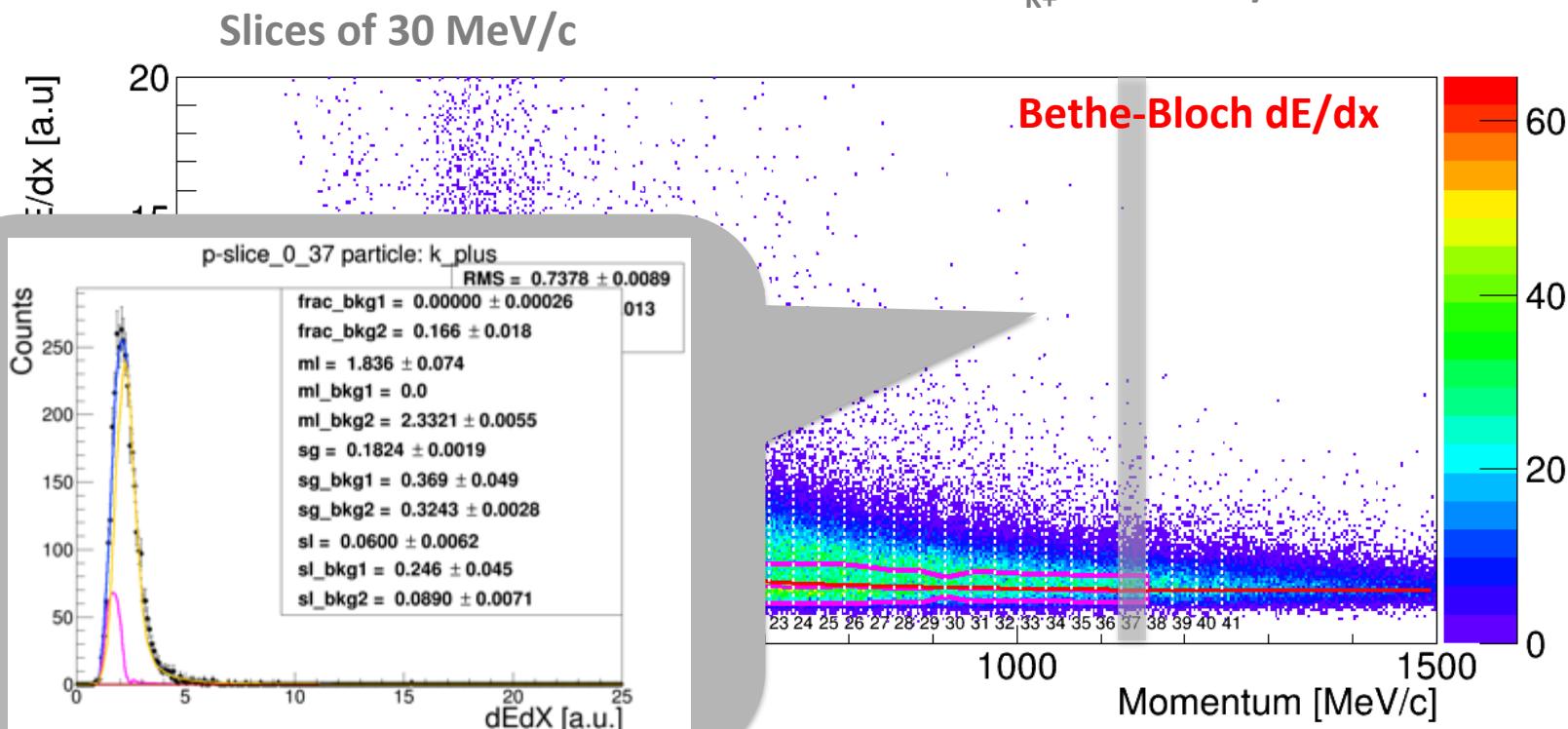


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

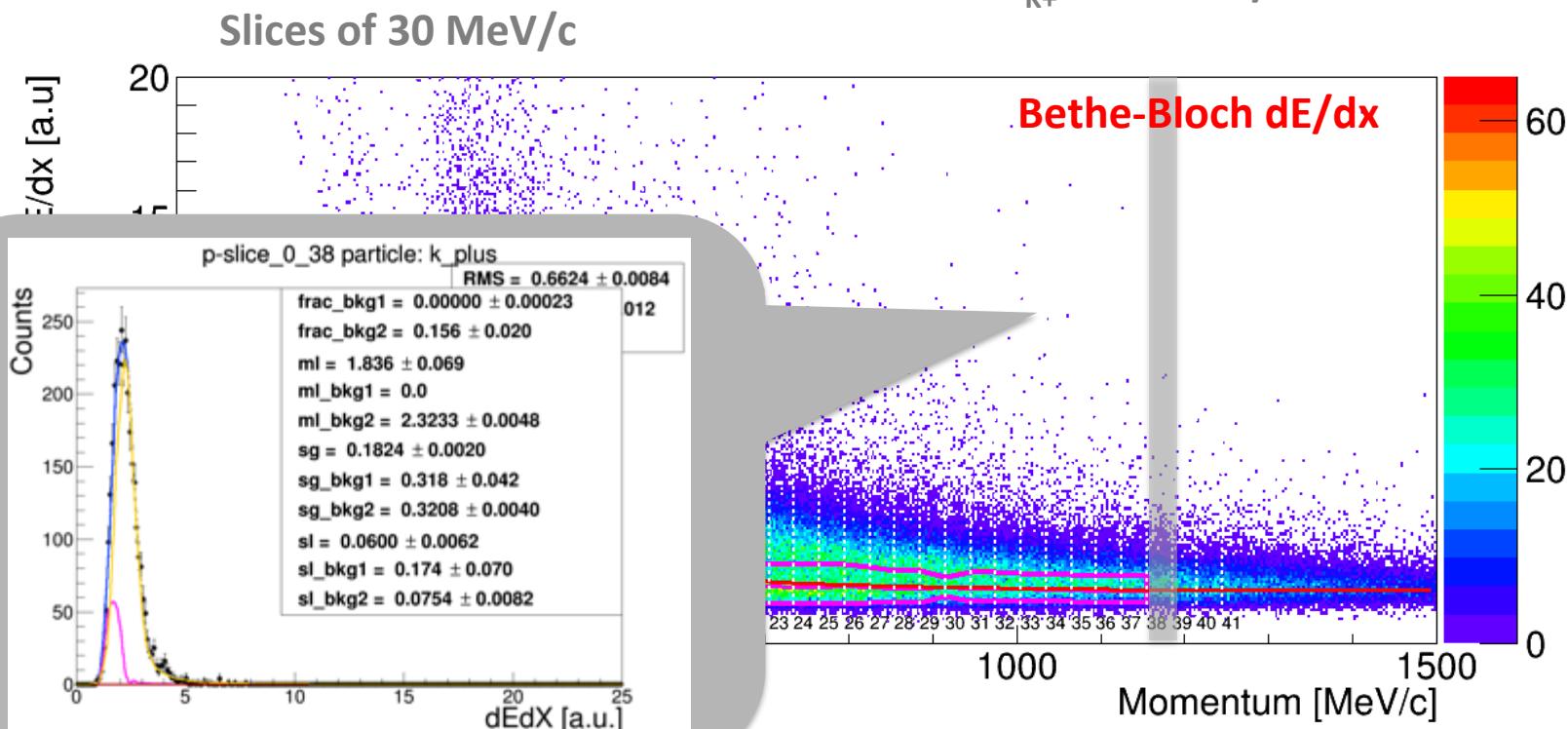


# PID Selection Procedure

EXP:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$



# GIBUU: SYSTEM 0

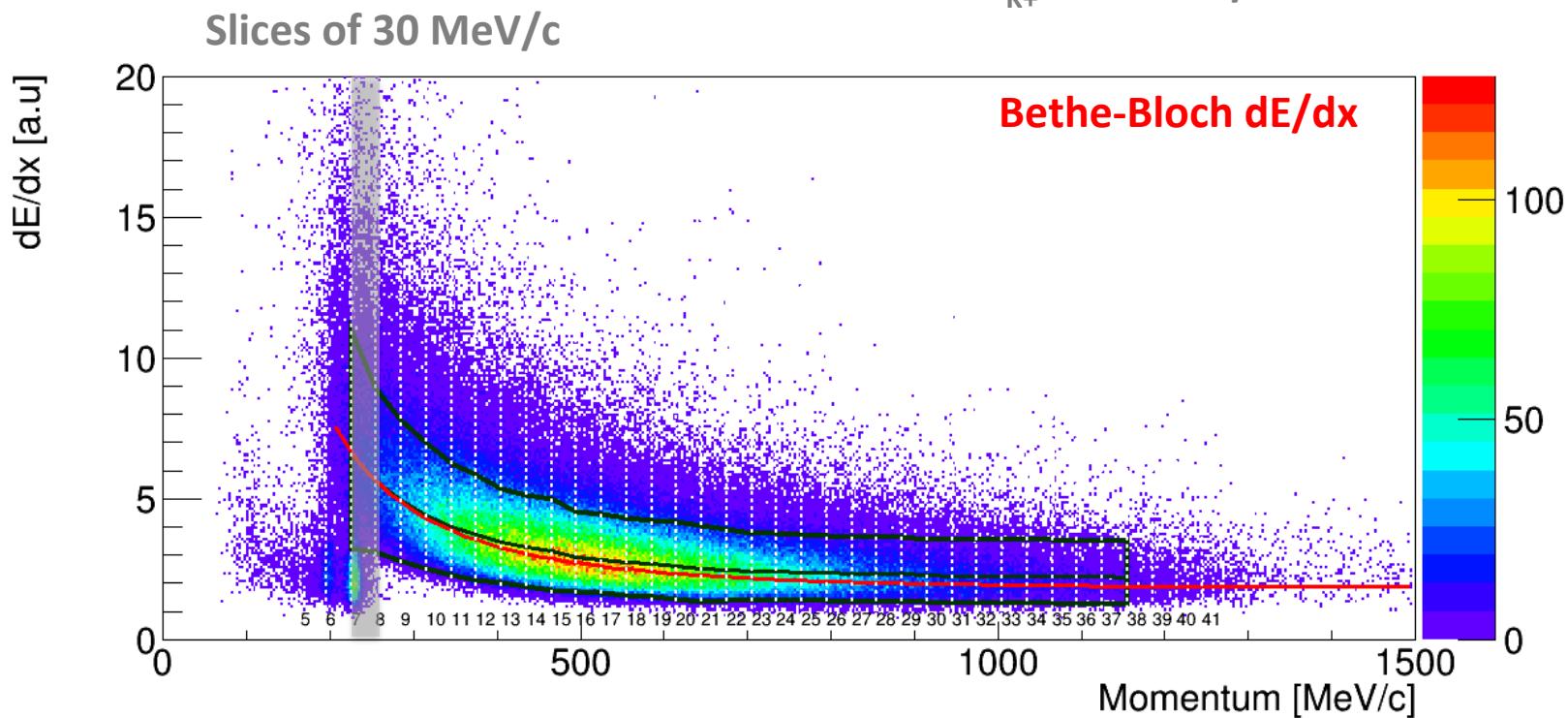


# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0

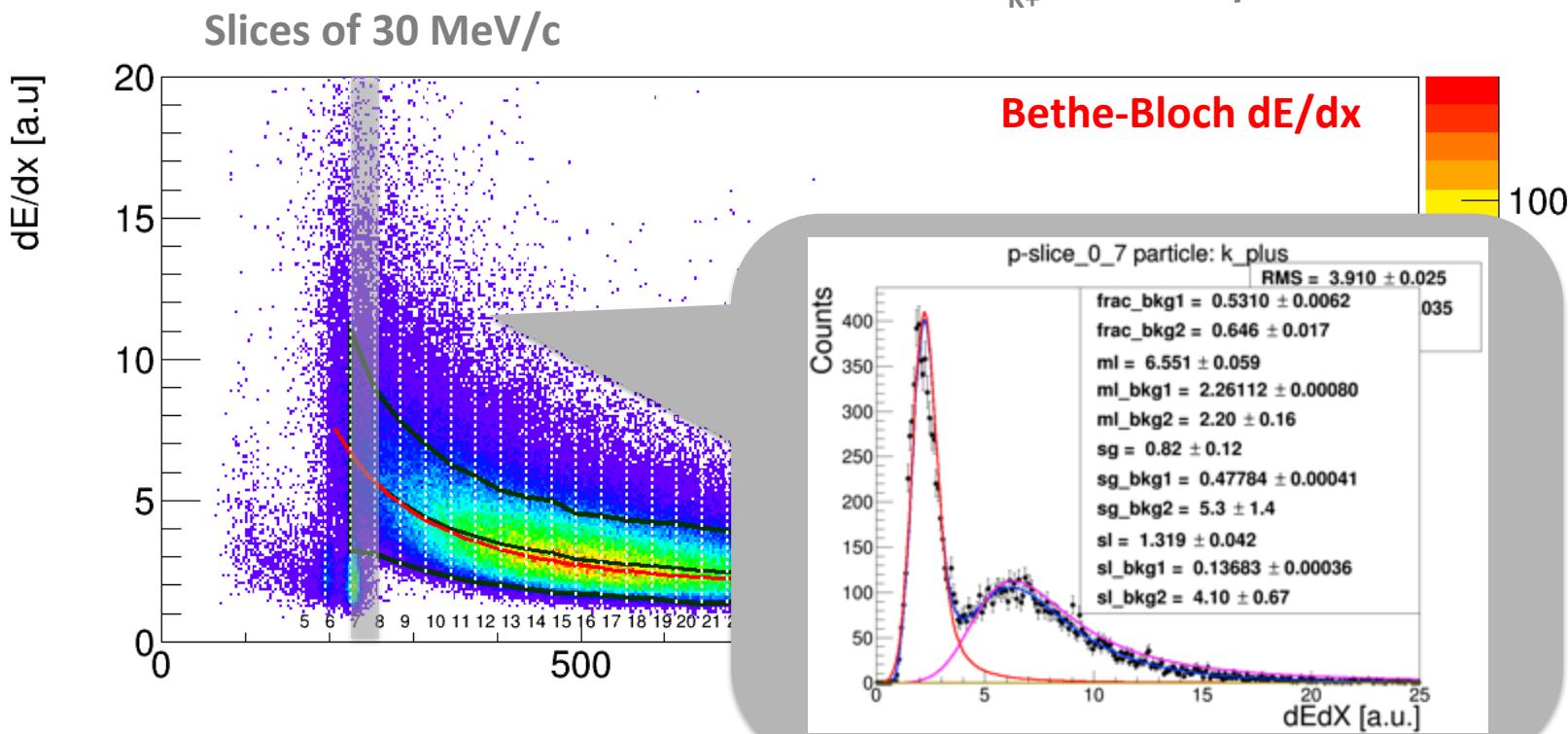
SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$



# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0

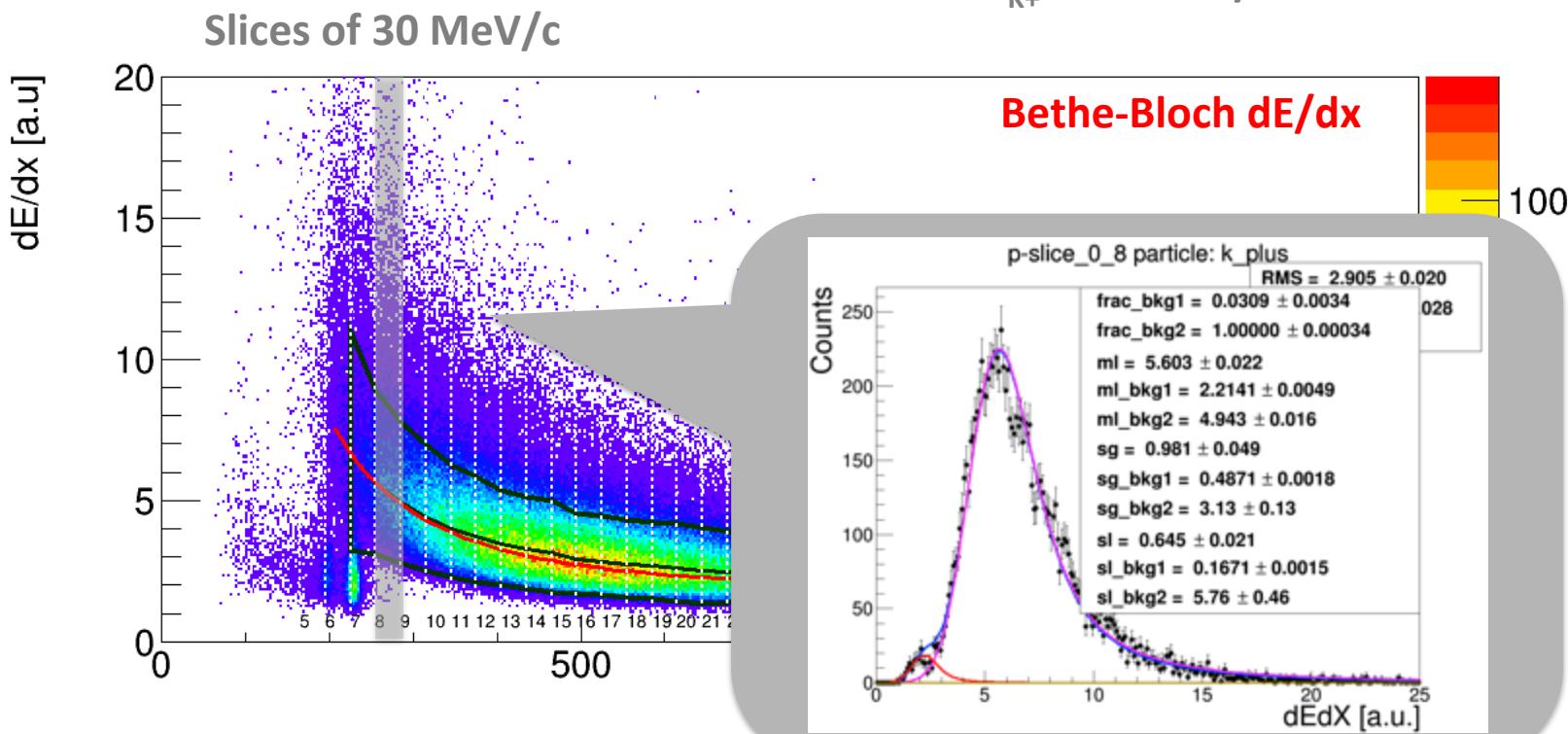


SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

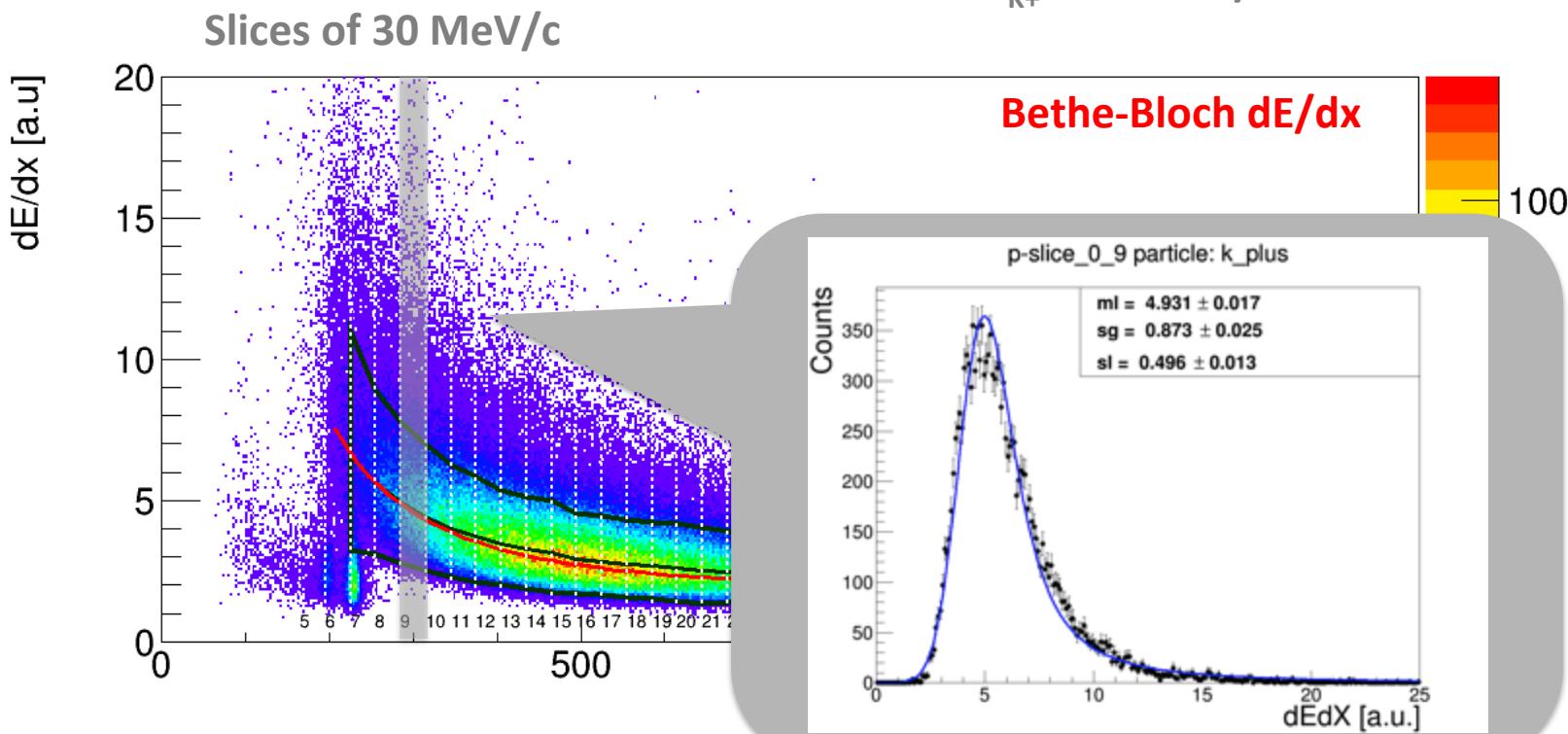
System 0



# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0

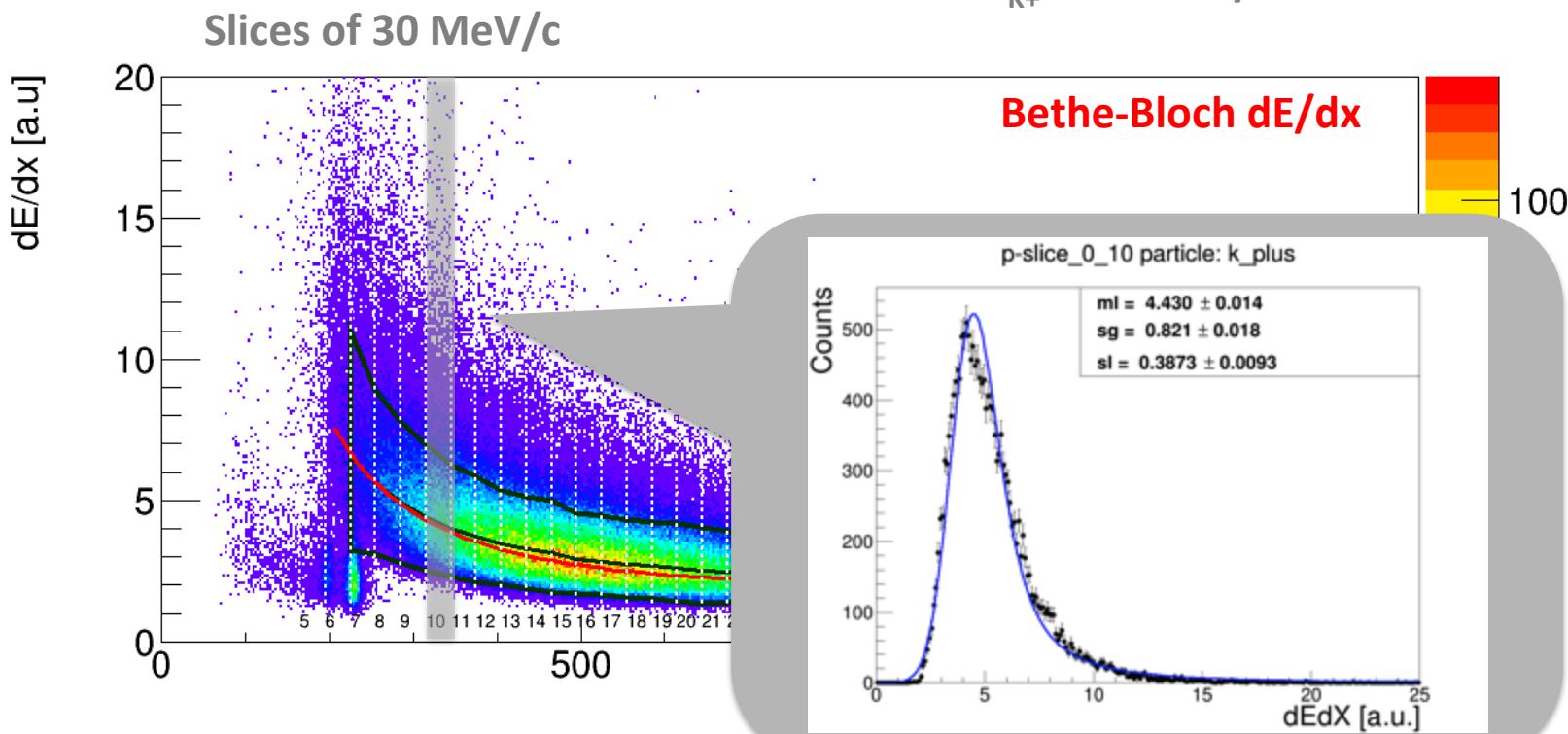


SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

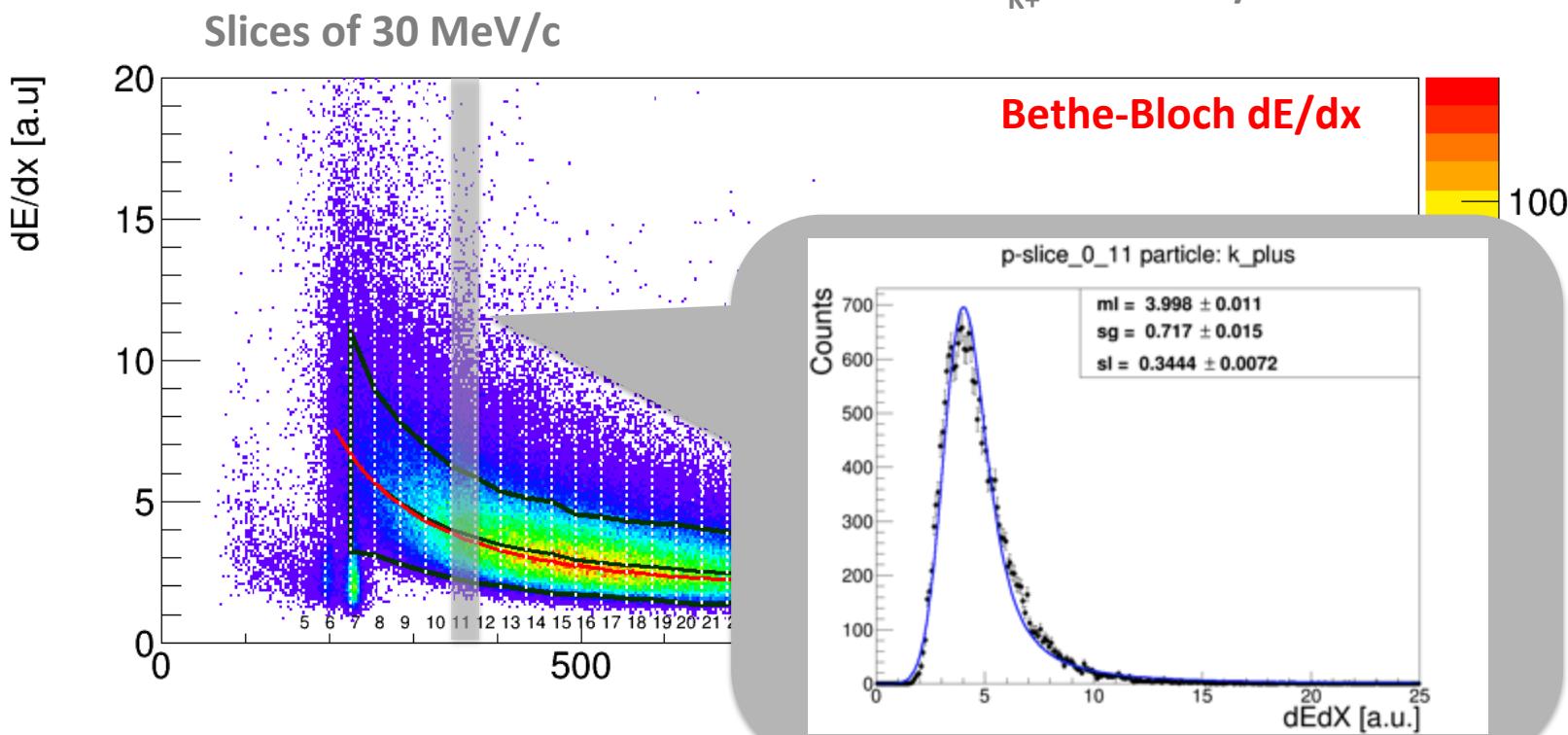
System 0



# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

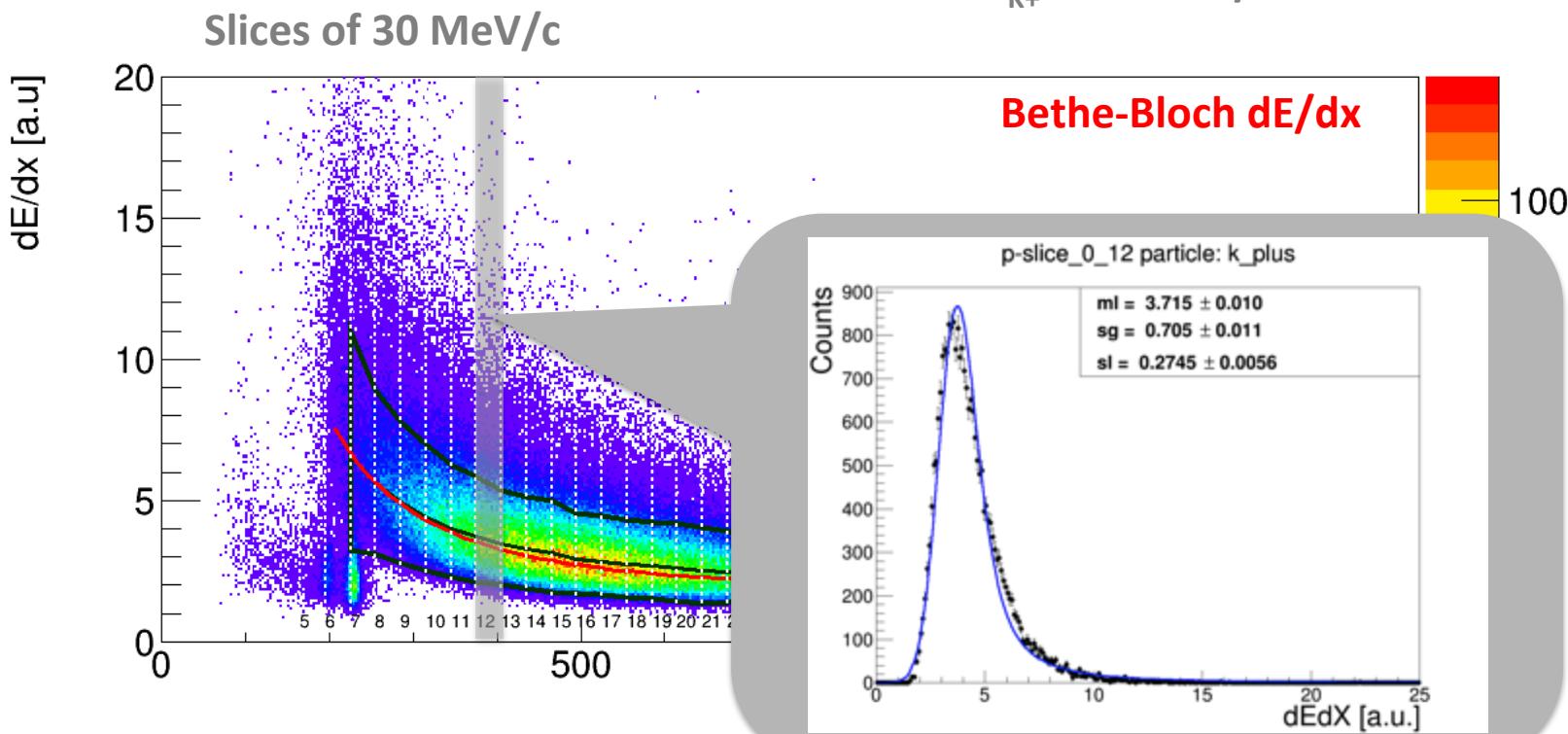
System 0



# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0

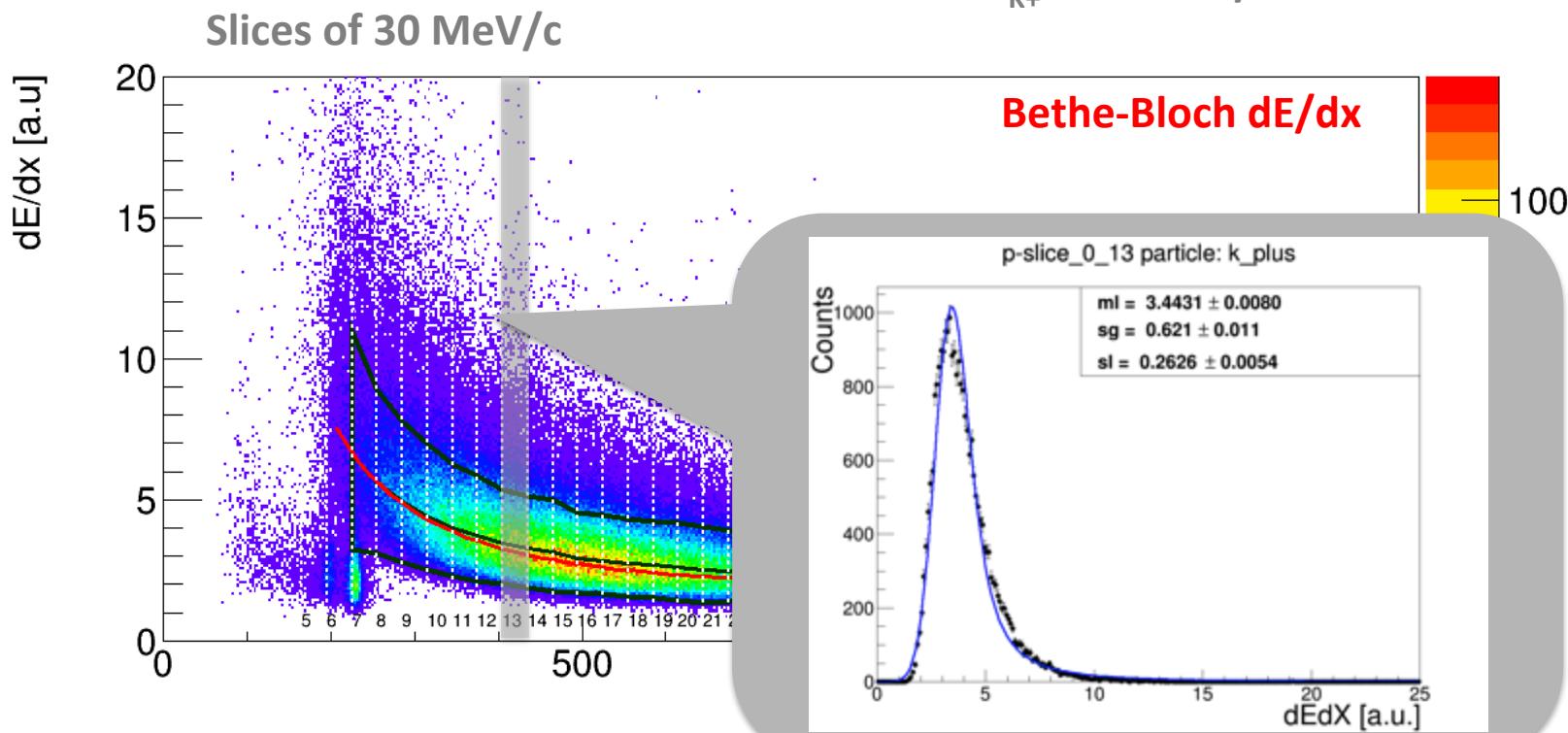


# PID Selection Procedure

## GiBUU: $\pi^*W$ (w.o. energy loss correction)

# System 0

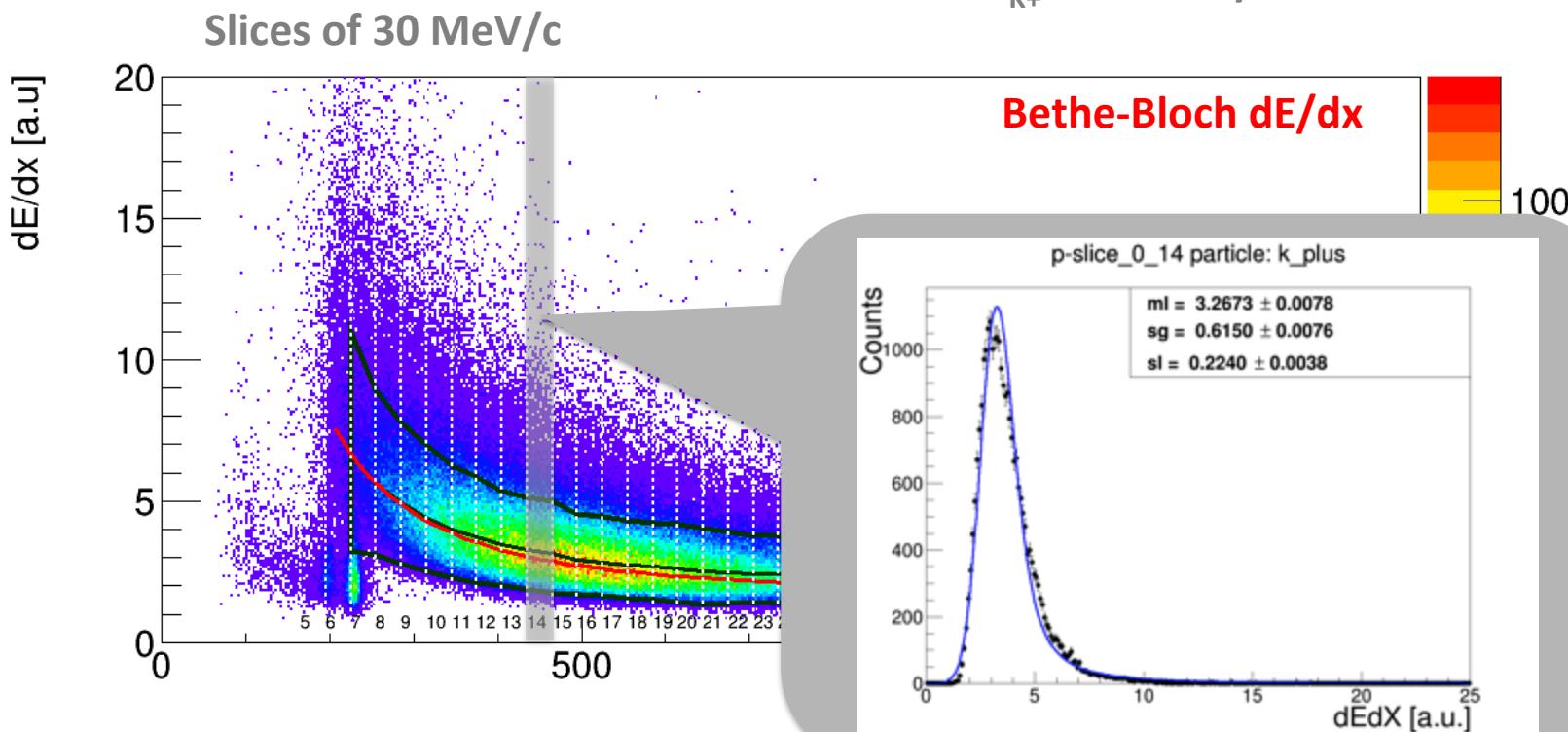
## SELECTION of Kaons: $M_{K^+} \pm 50 \text{ MeV}/c^2$



# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0

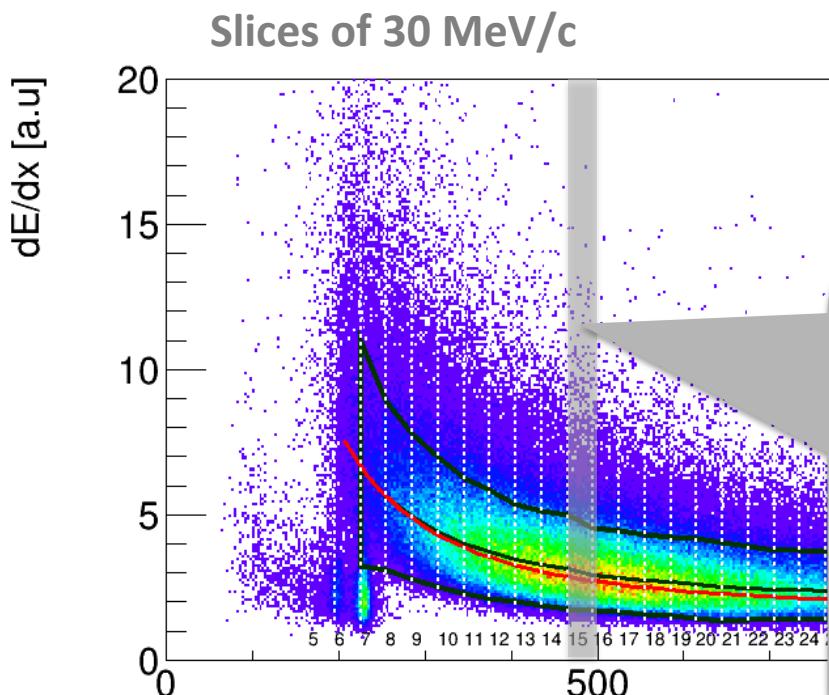


SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

# PID Selection Procedure

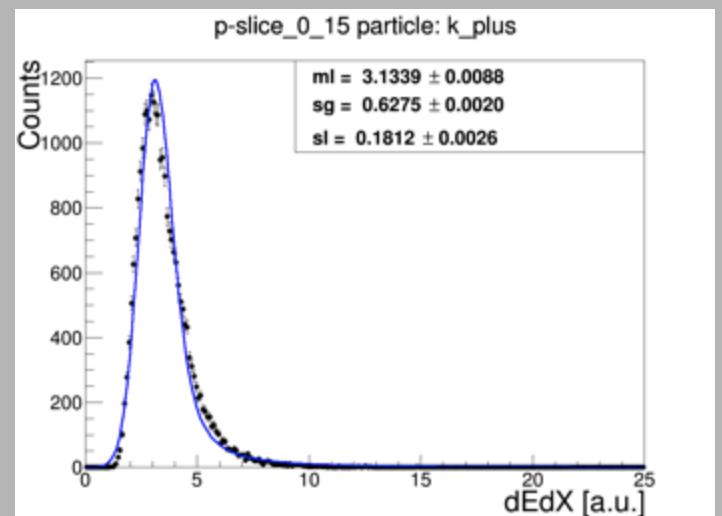
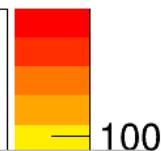
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

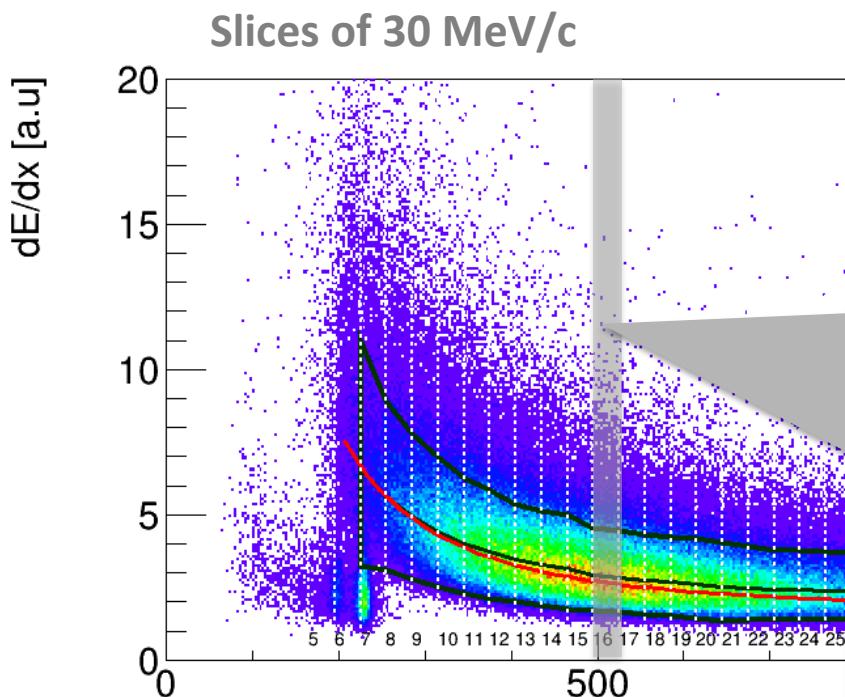
Bethe-Bloch  $dE/dx$



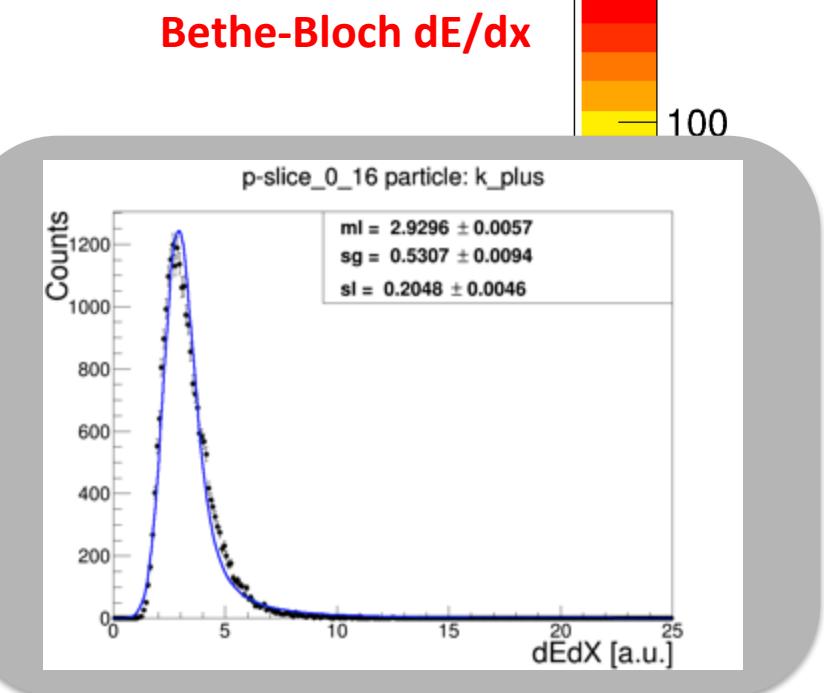
# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



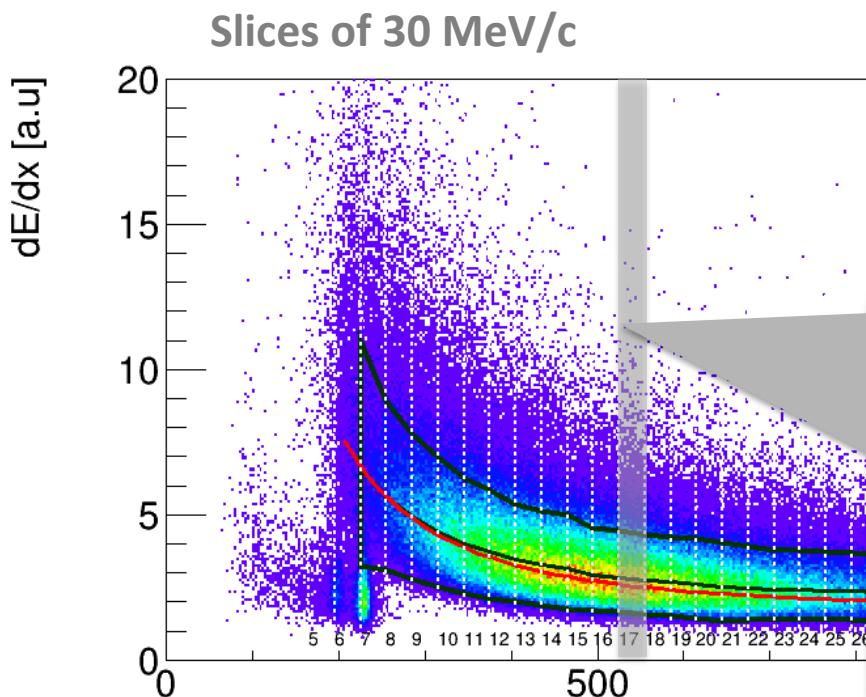
SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$



# PID Selection Procedure

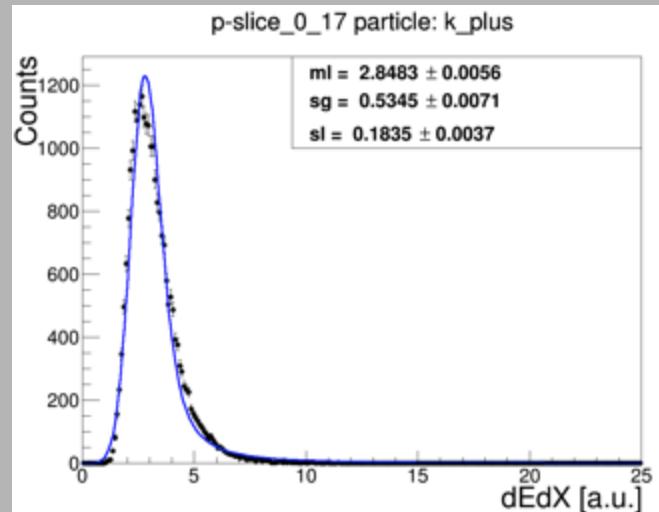
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

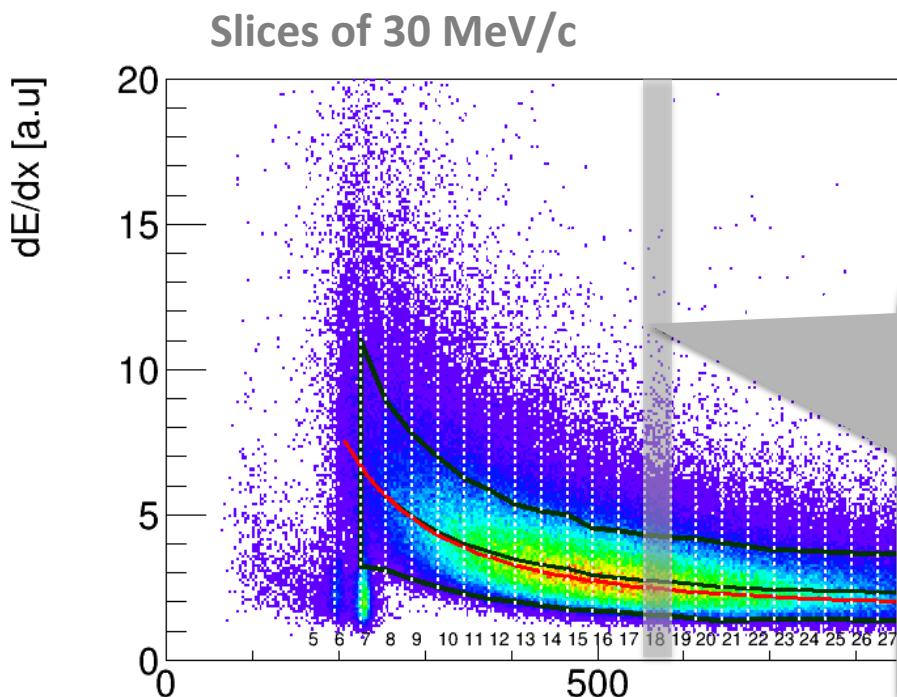
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

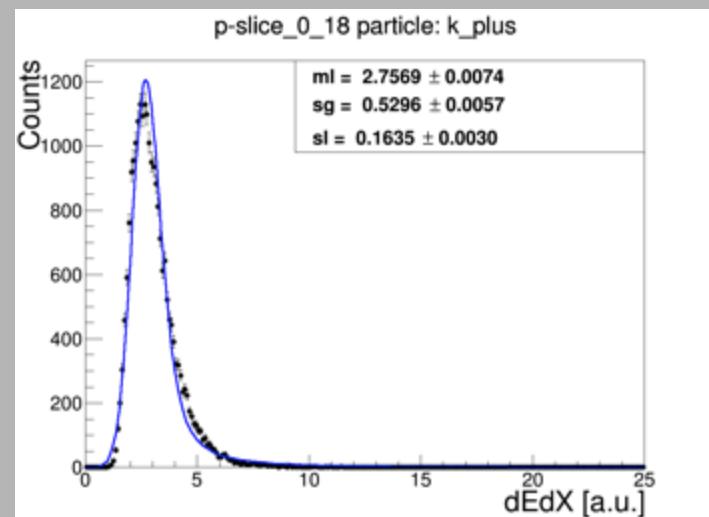
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

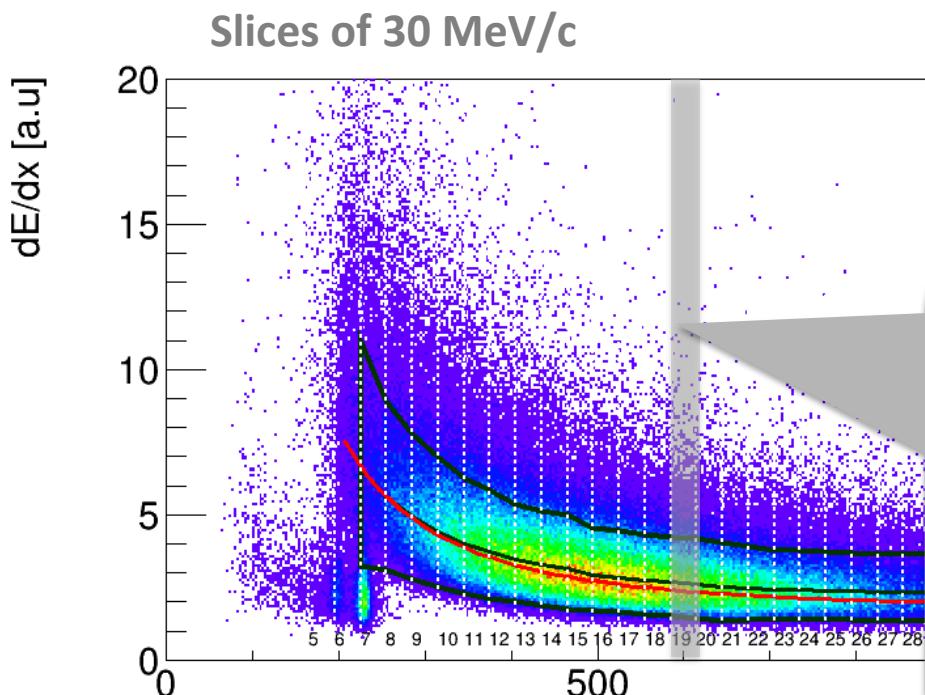
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

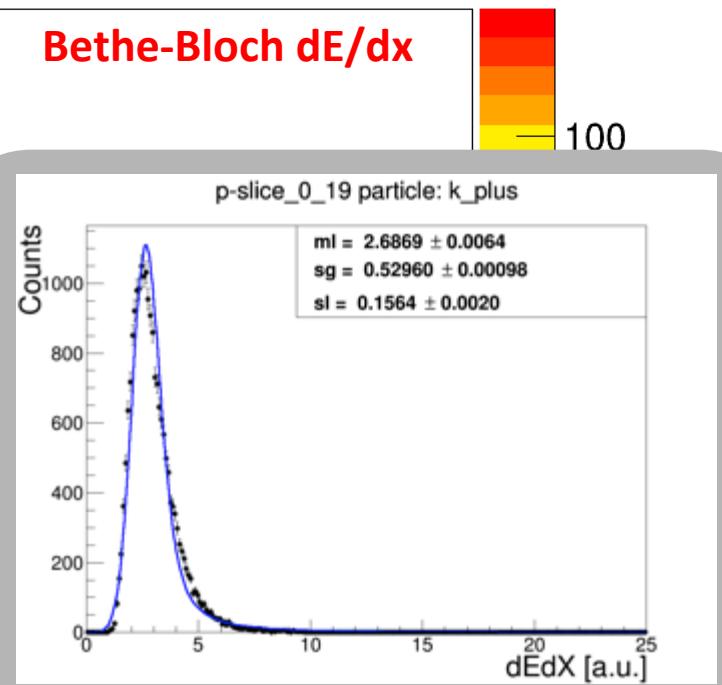
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

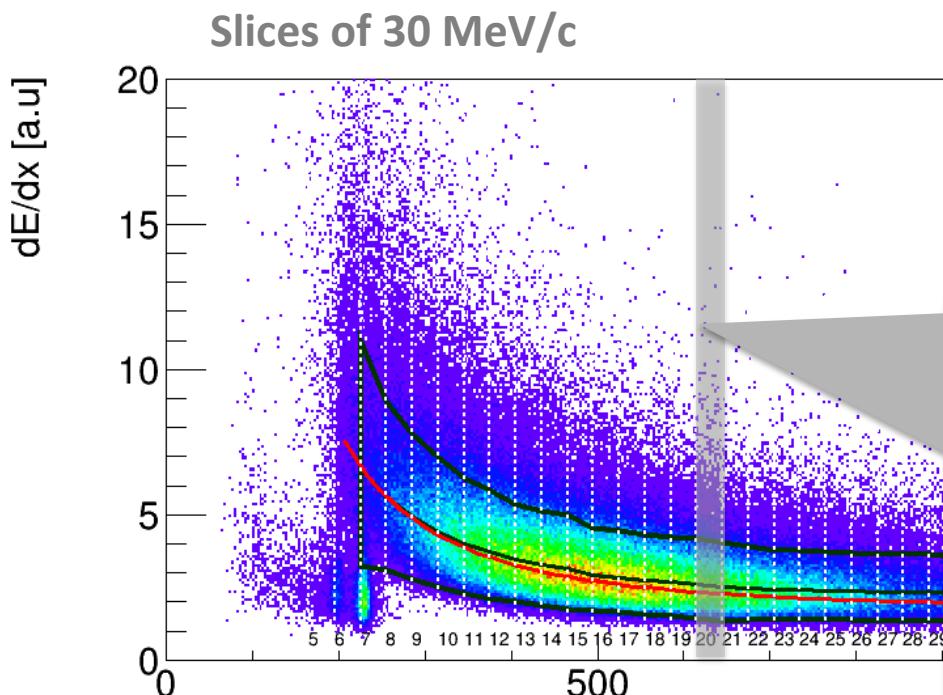
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

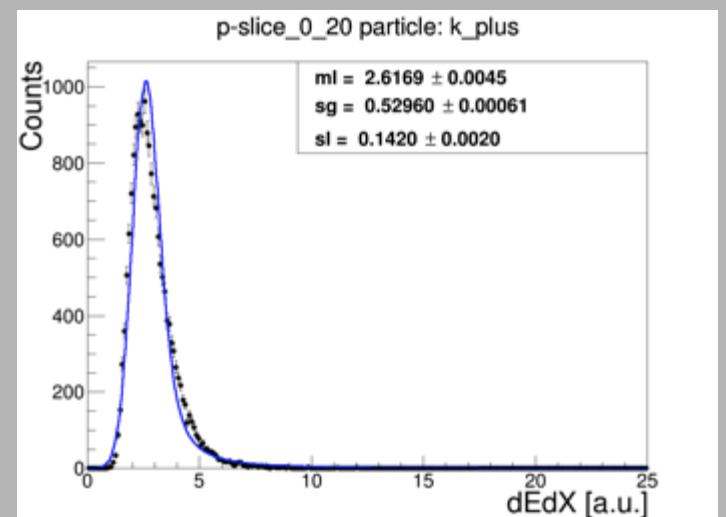
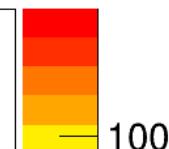
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

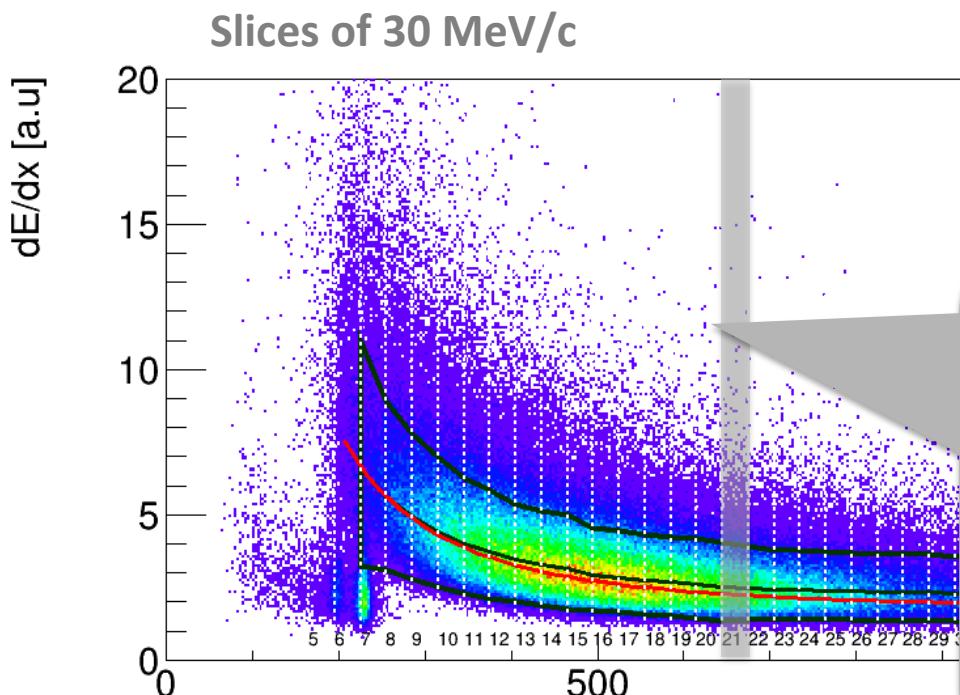
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

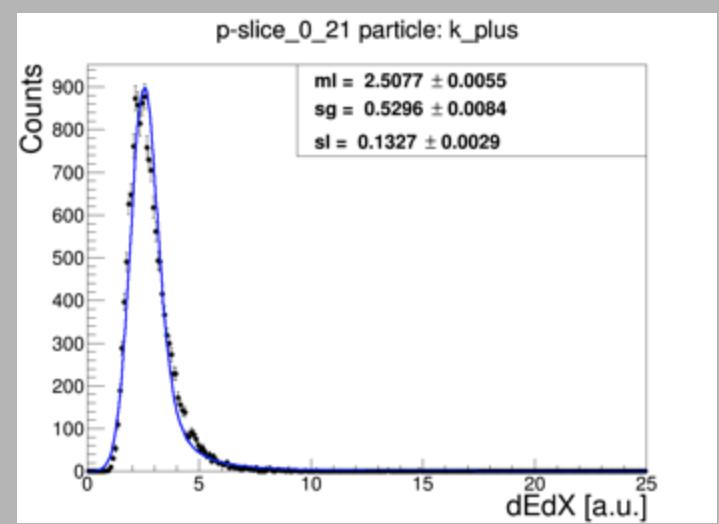
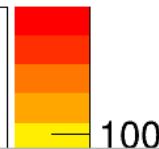
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
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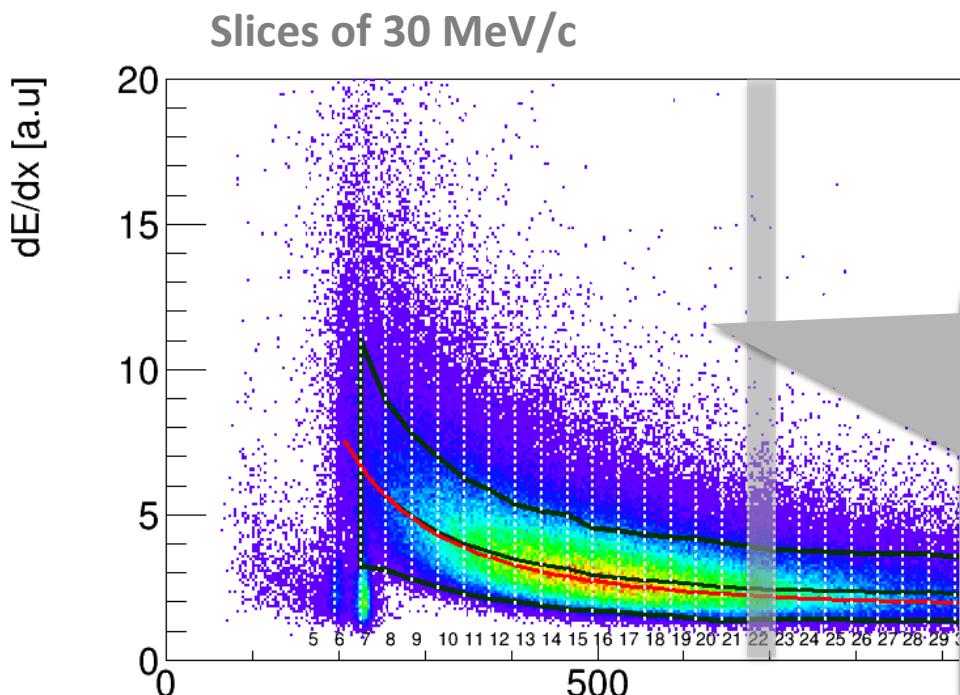
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

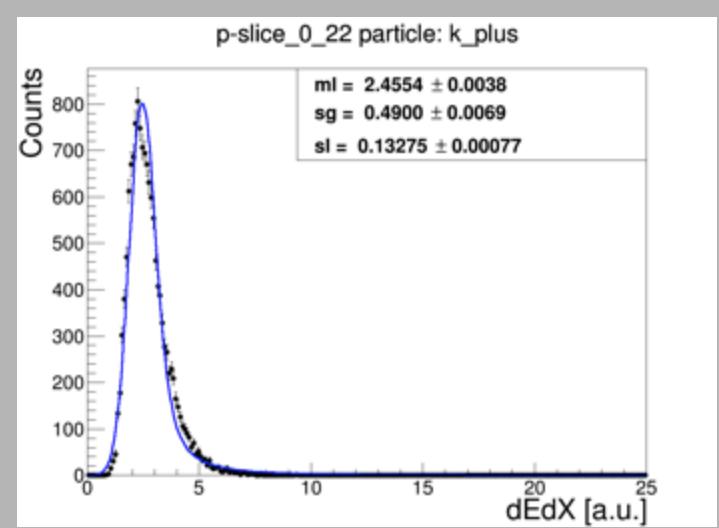
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

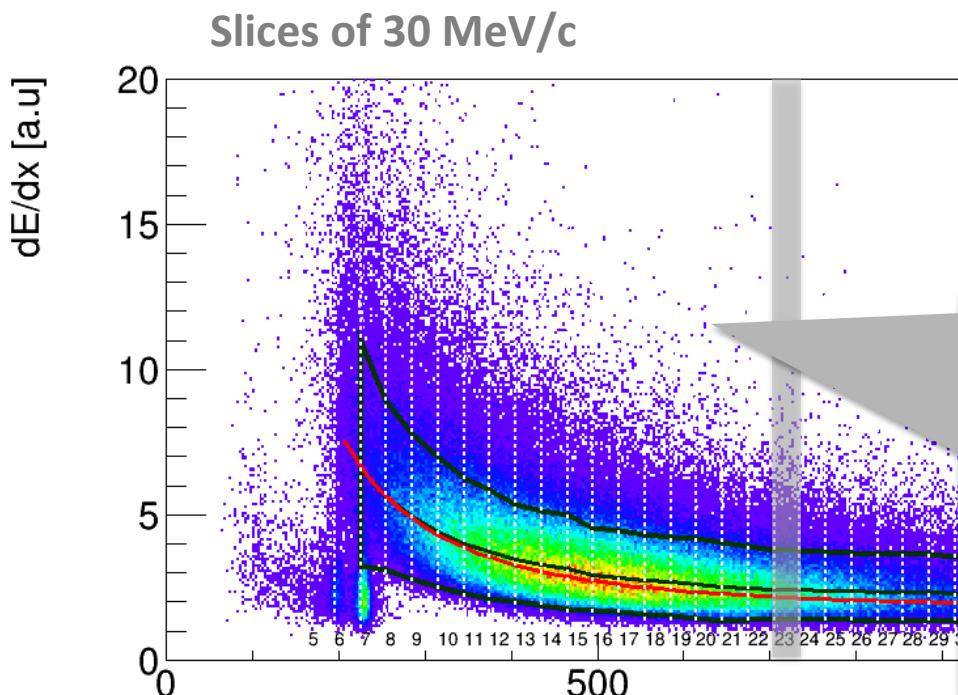
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

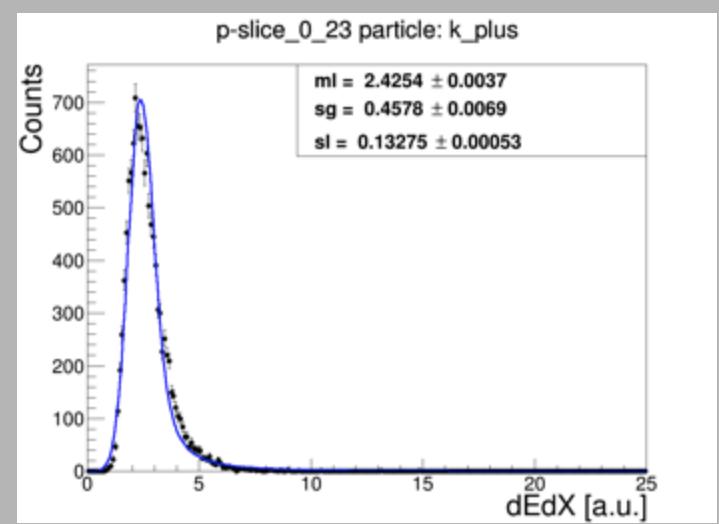
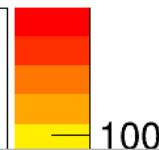
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

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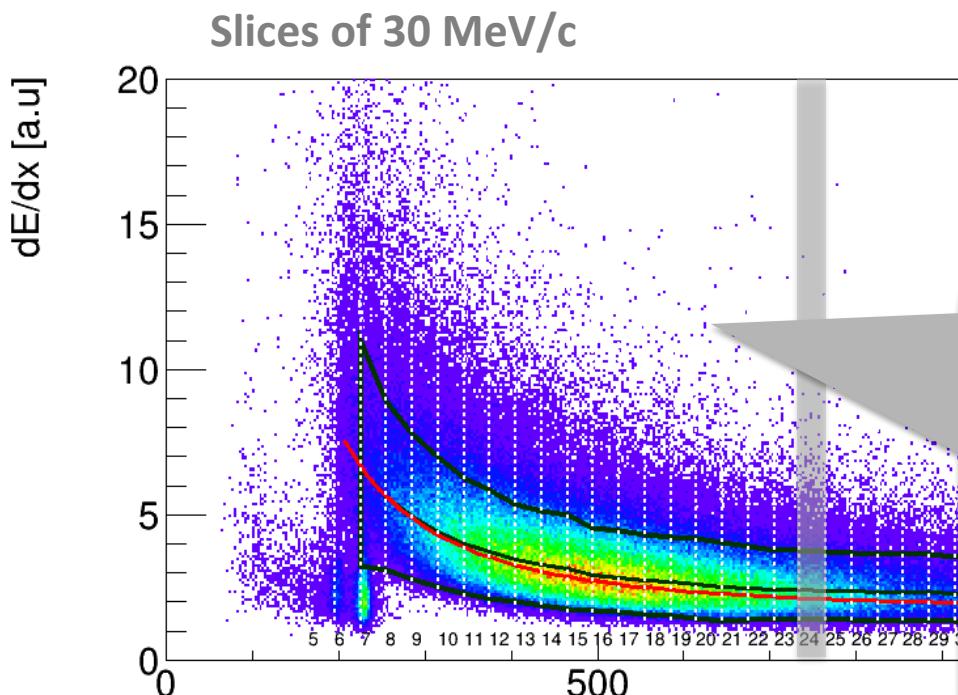
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

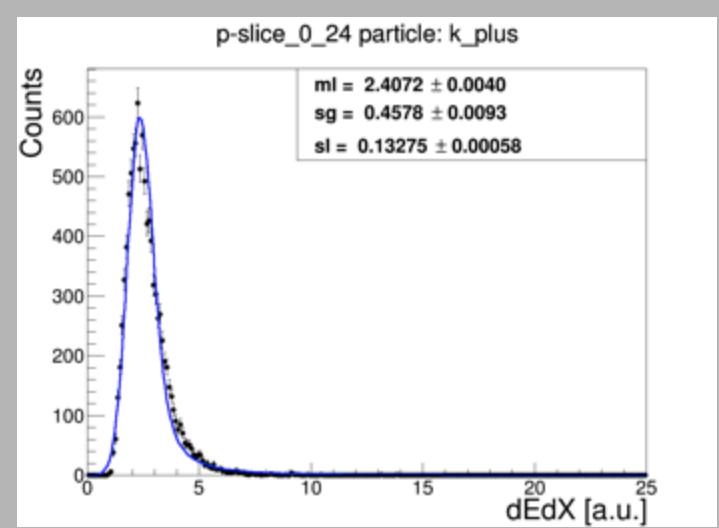
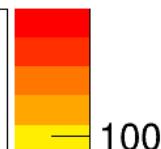
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



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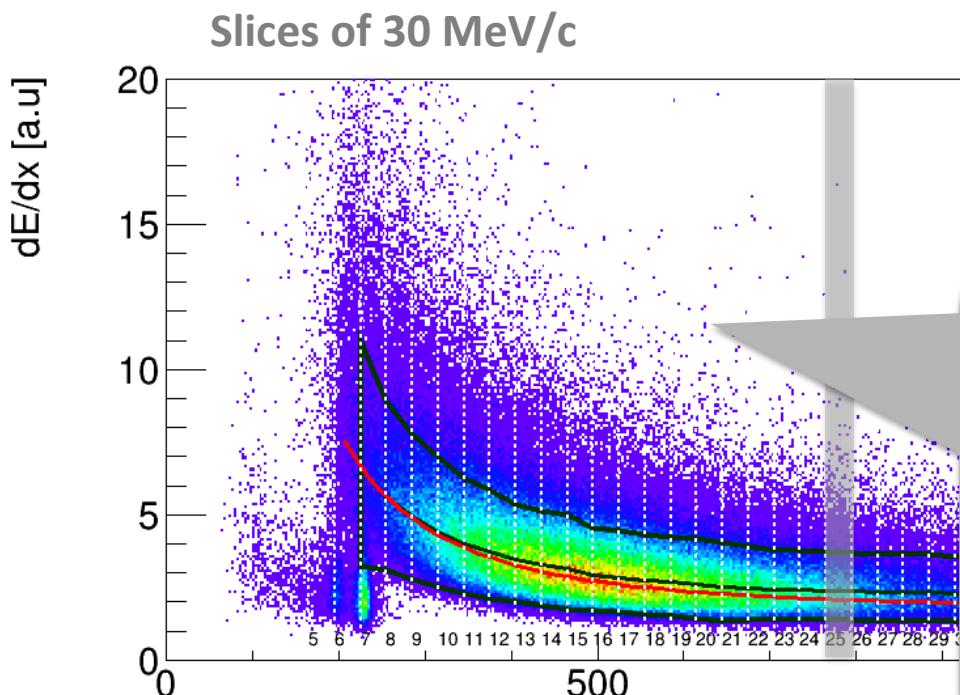
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

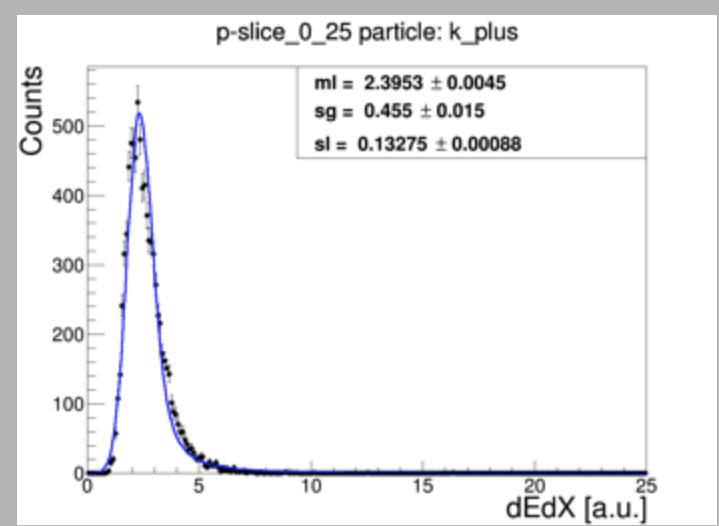
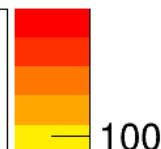
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
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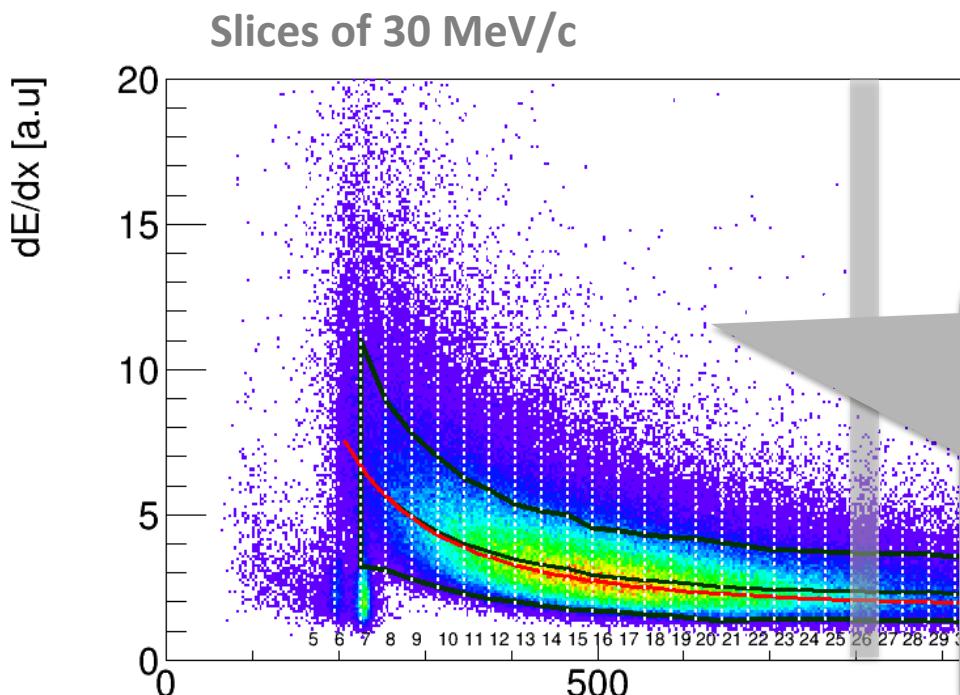
Bethe-Bloch  $dE/dx$



# PID Selection Procedure

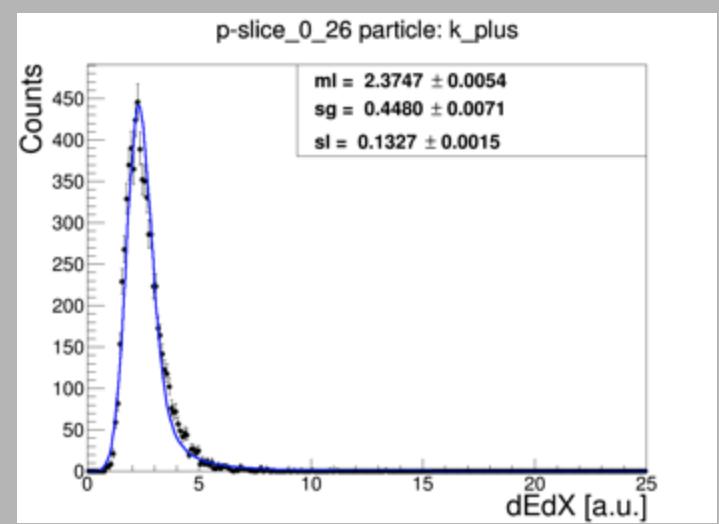
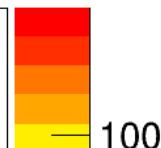
GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0



SELECTION of Kaons:  
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Bethe-Bloch  $dE/dx$

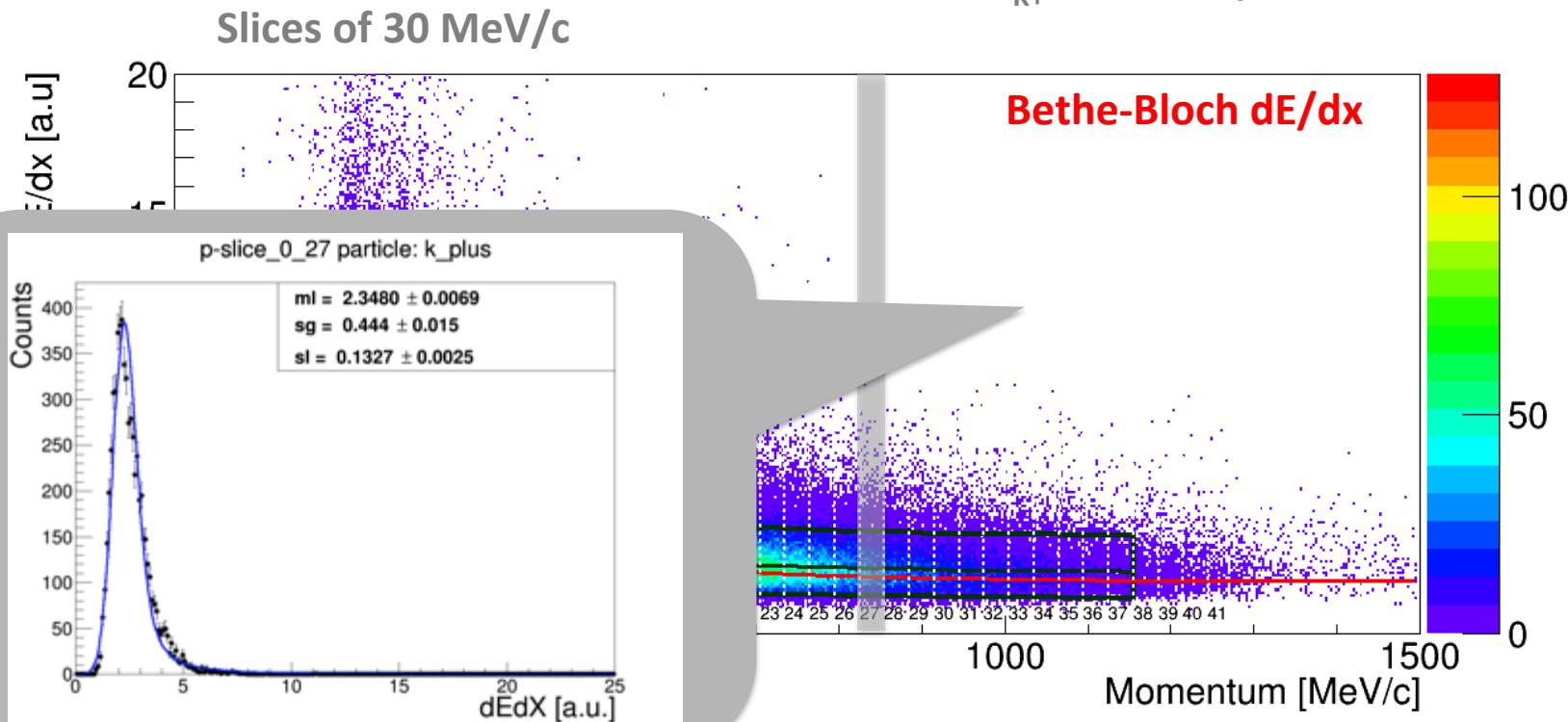


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GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

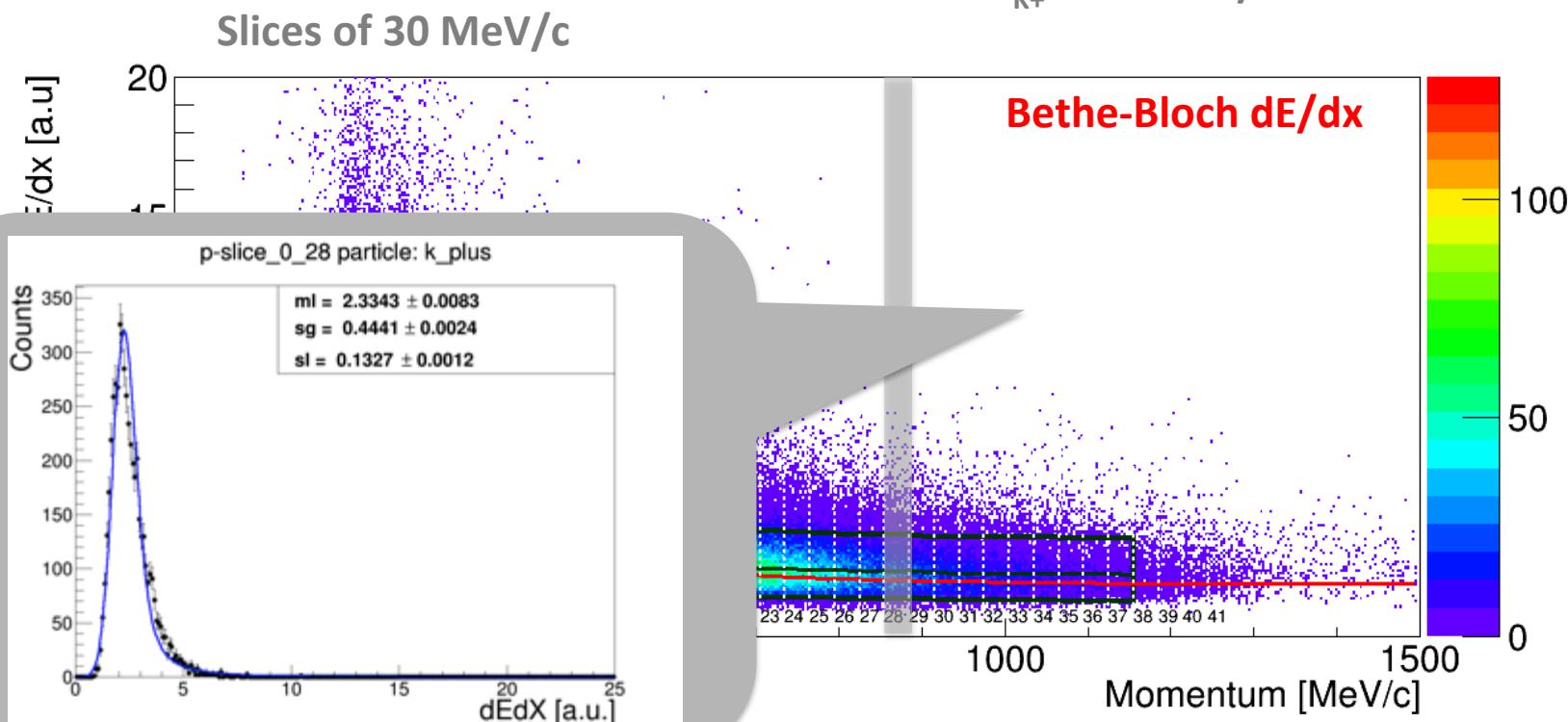


# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

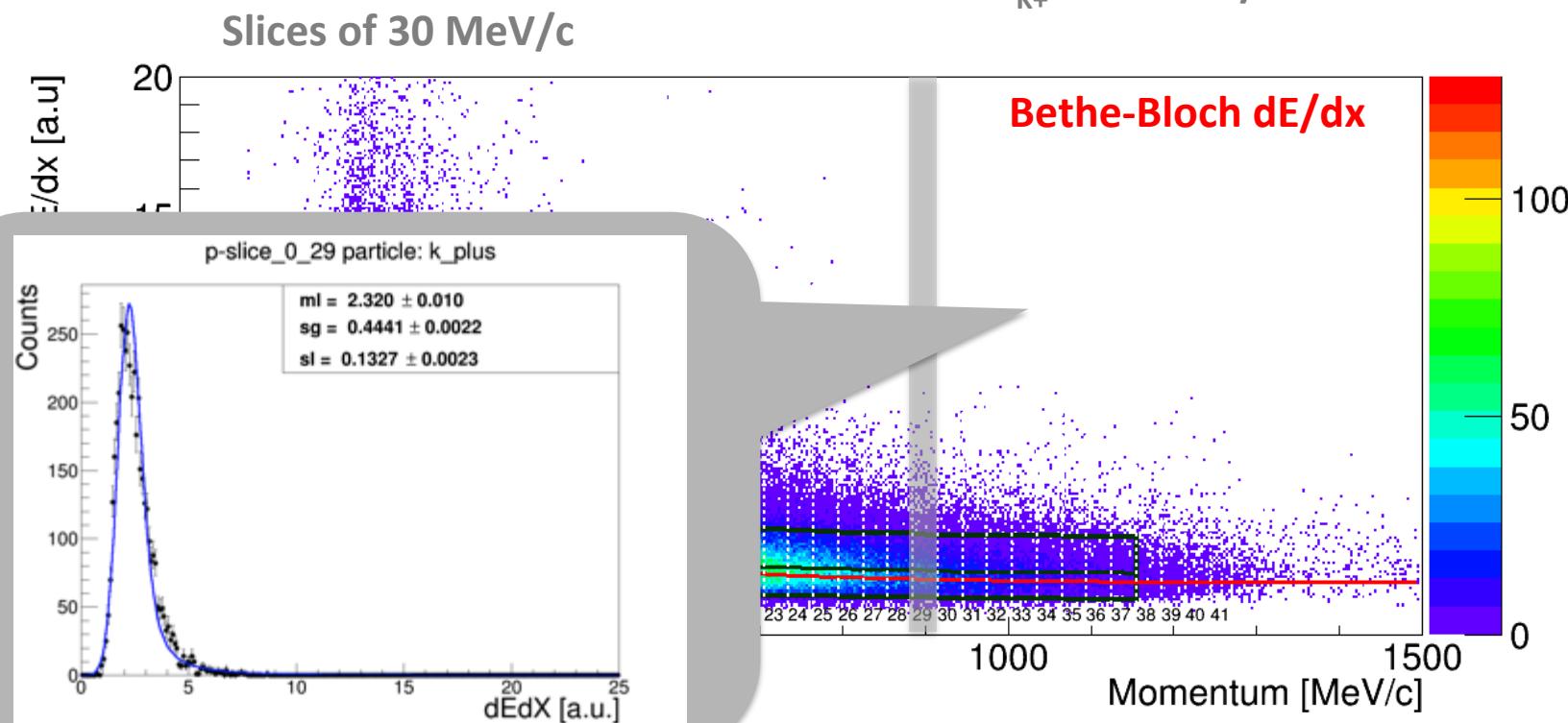


# PID Selection Procedure

# GiBUU: $\pi^-W$ (w.o. energy loss correction)

## System 0

## SELECTION of Kaons: $M_{K^+} \pm 50 \text{ MeV}/c^2$

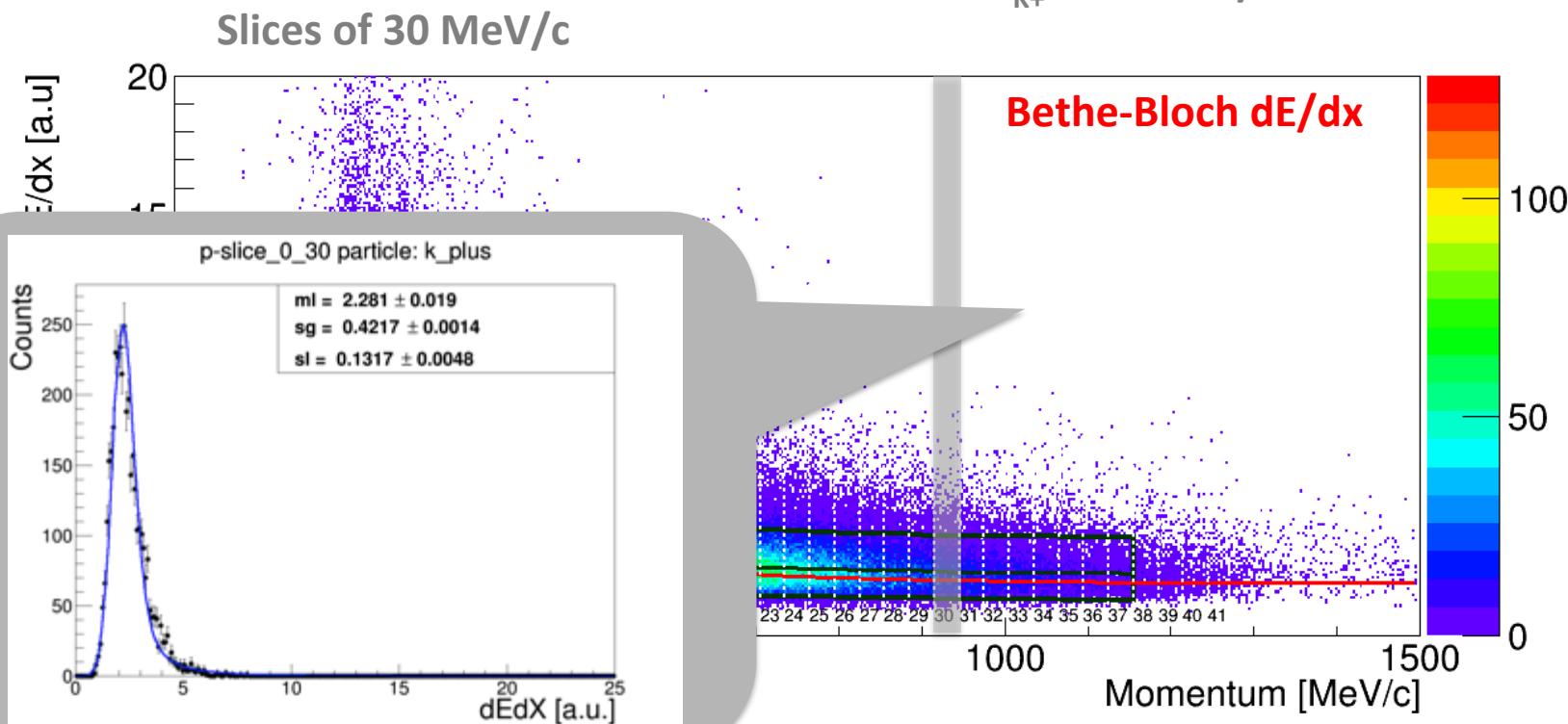


# PID Selection Procedure

GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

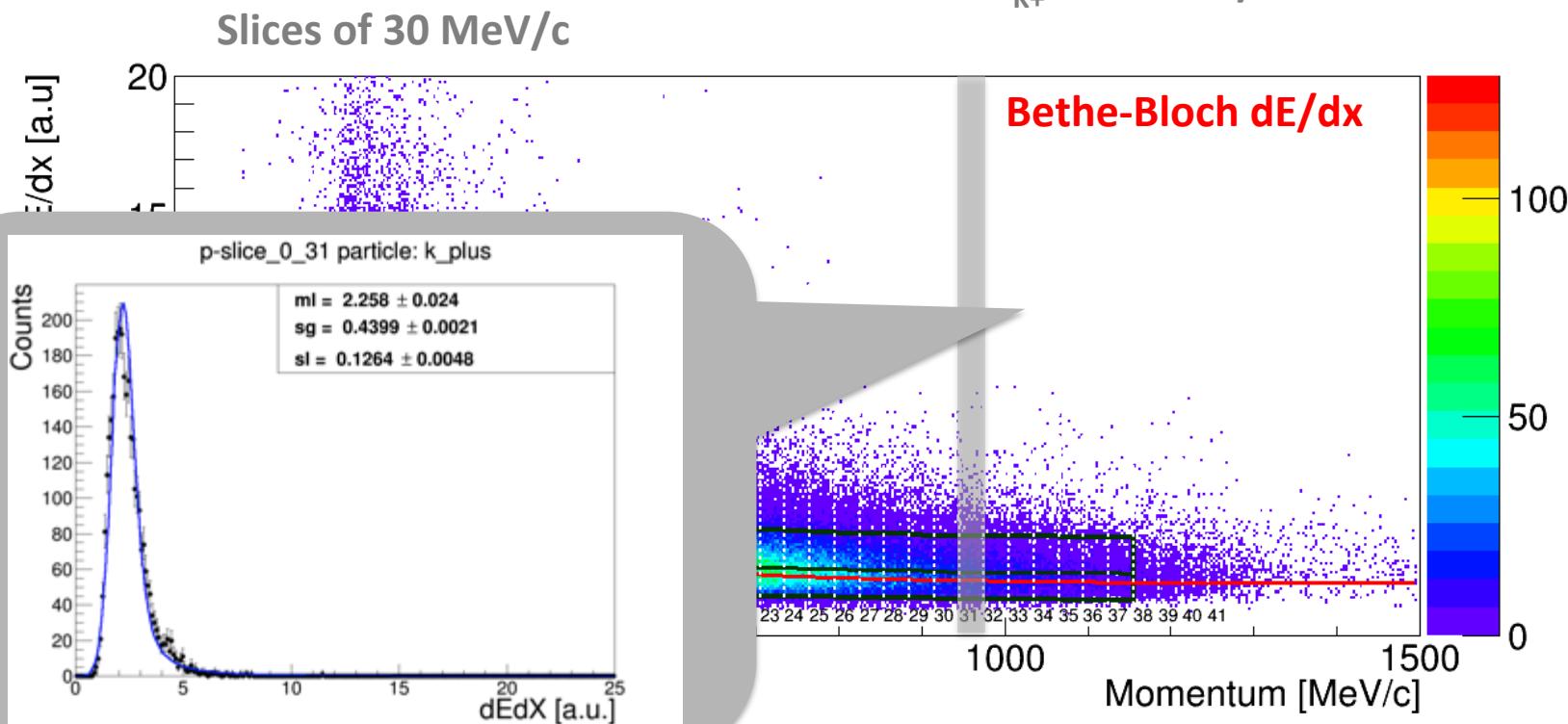


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GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

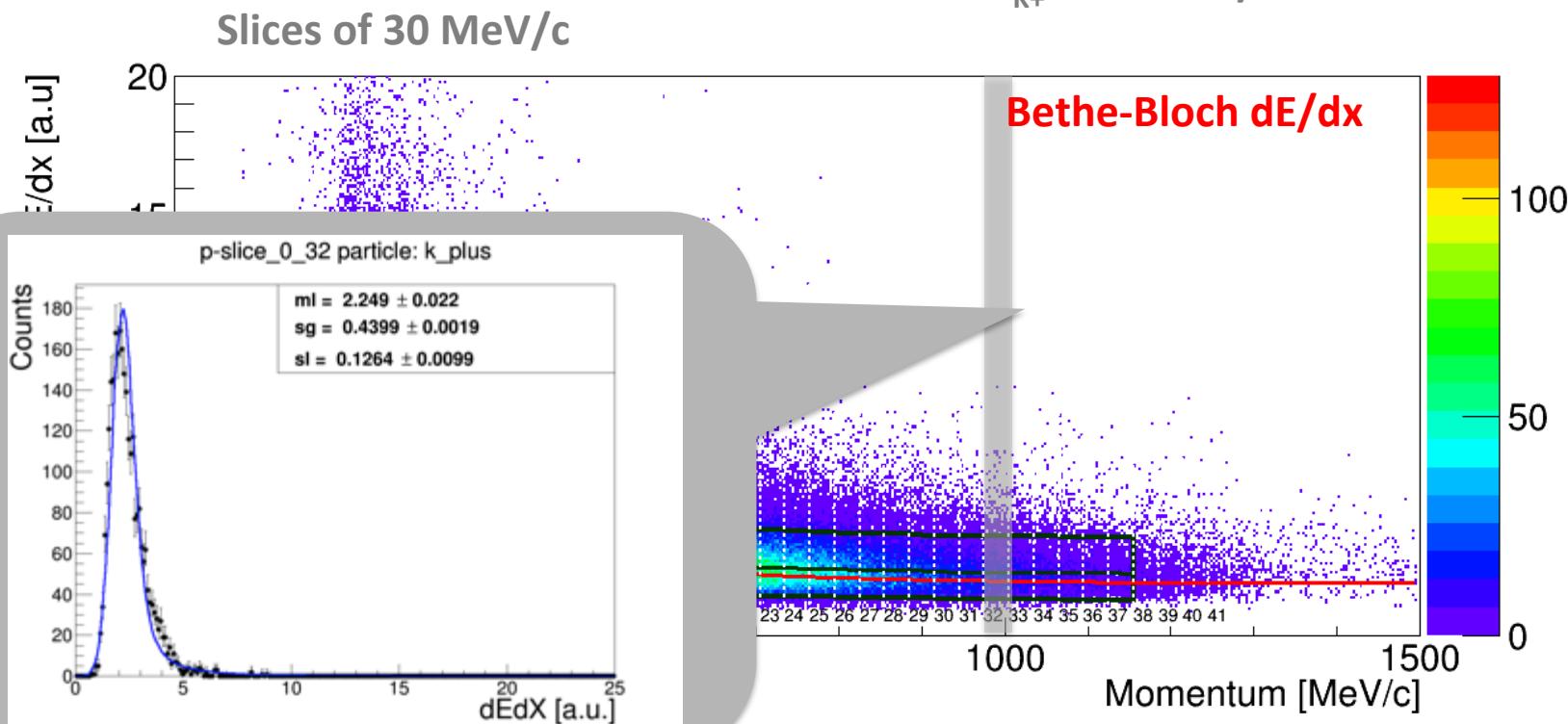


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GiBUU:  $\pi^-W$  (w.o. energy loss correction)

System 0

SELECTION of Kaons:  
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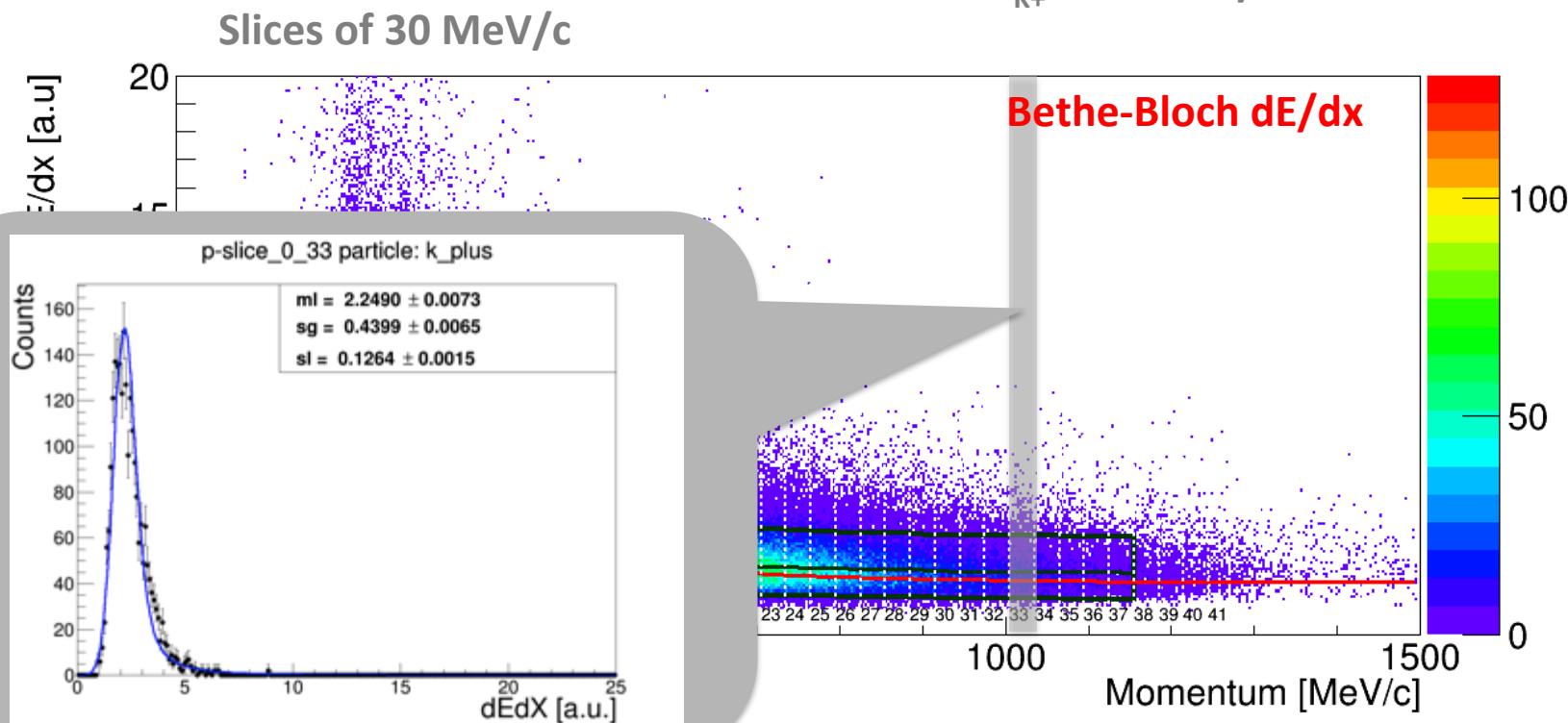


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System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

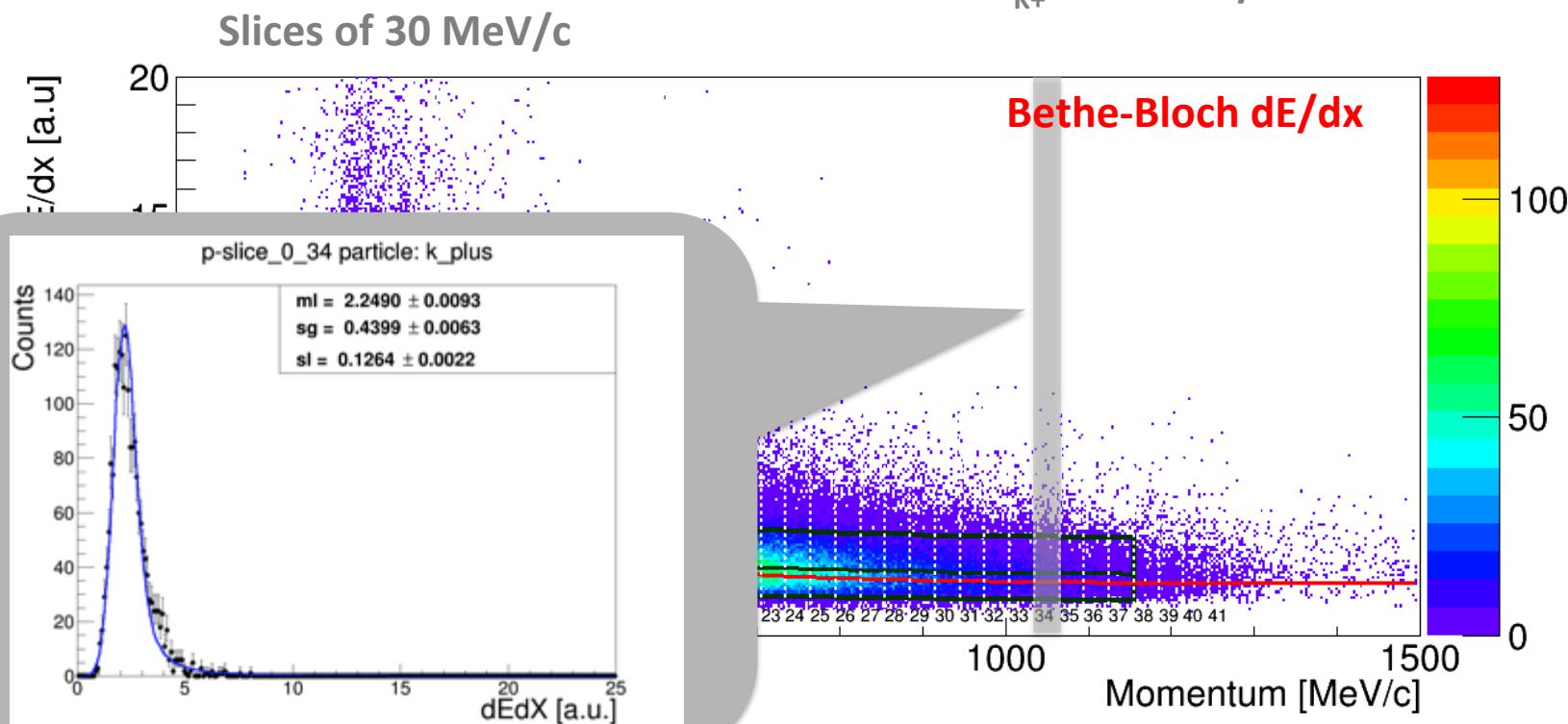


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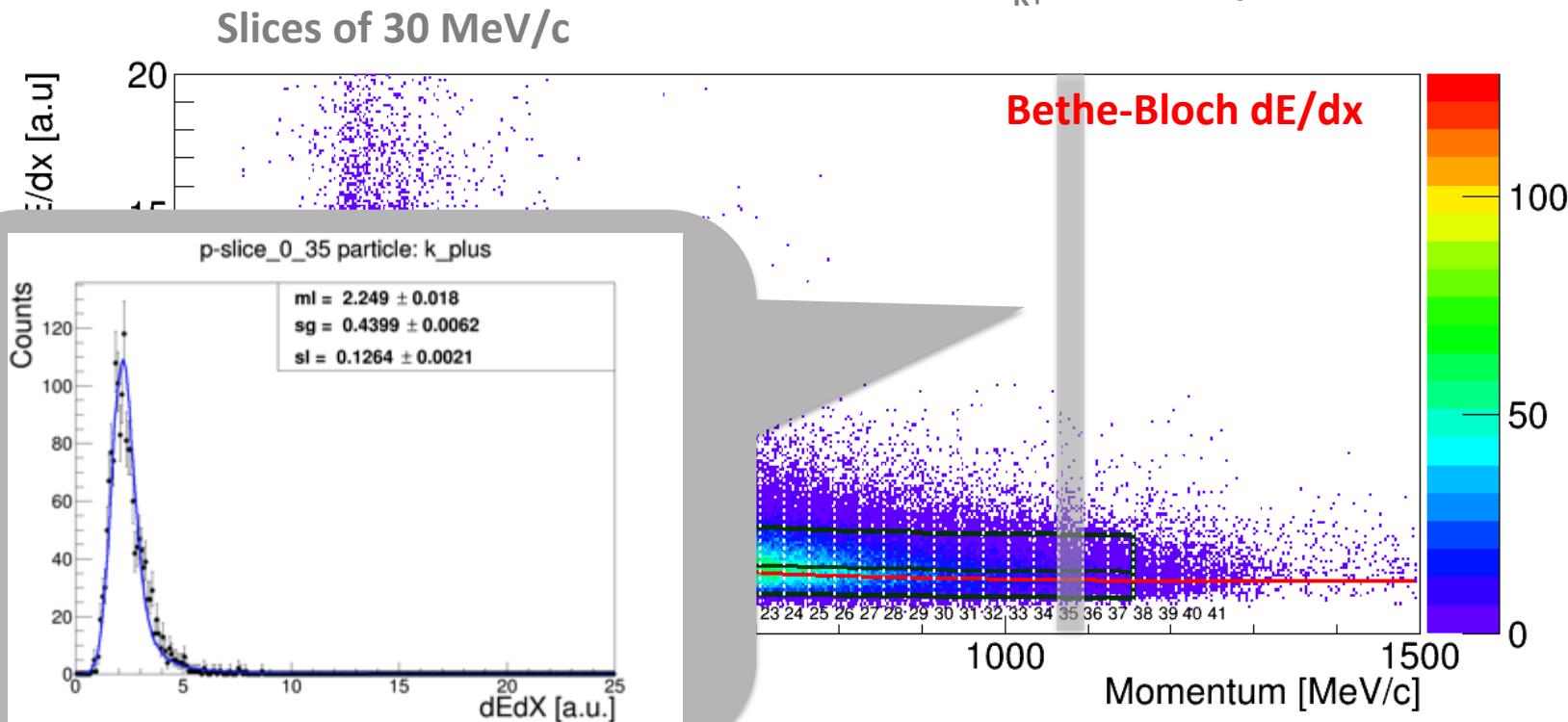


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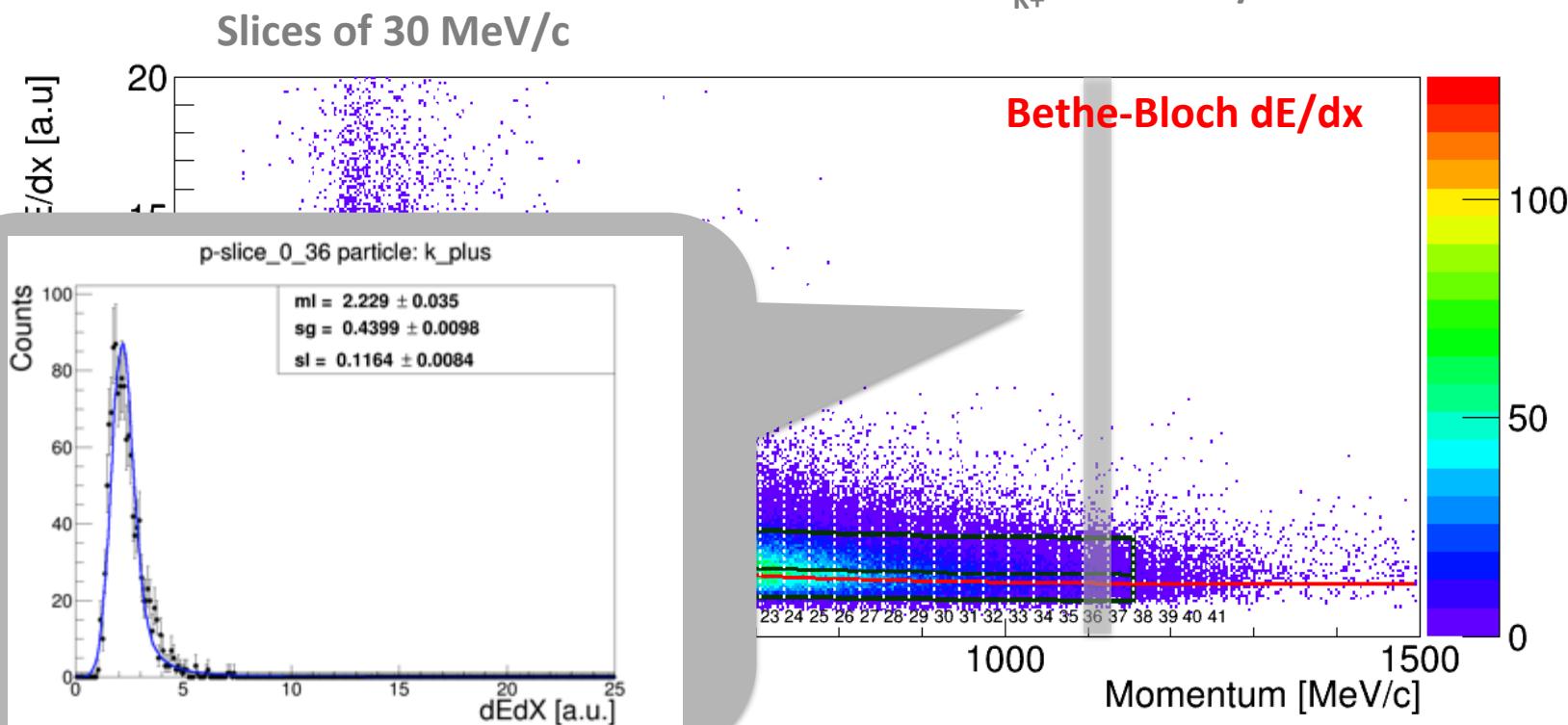


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System 0

SELECTION of Kaons:  
 $M_{K+} \pm 50 \text{ MeV}/c^2$

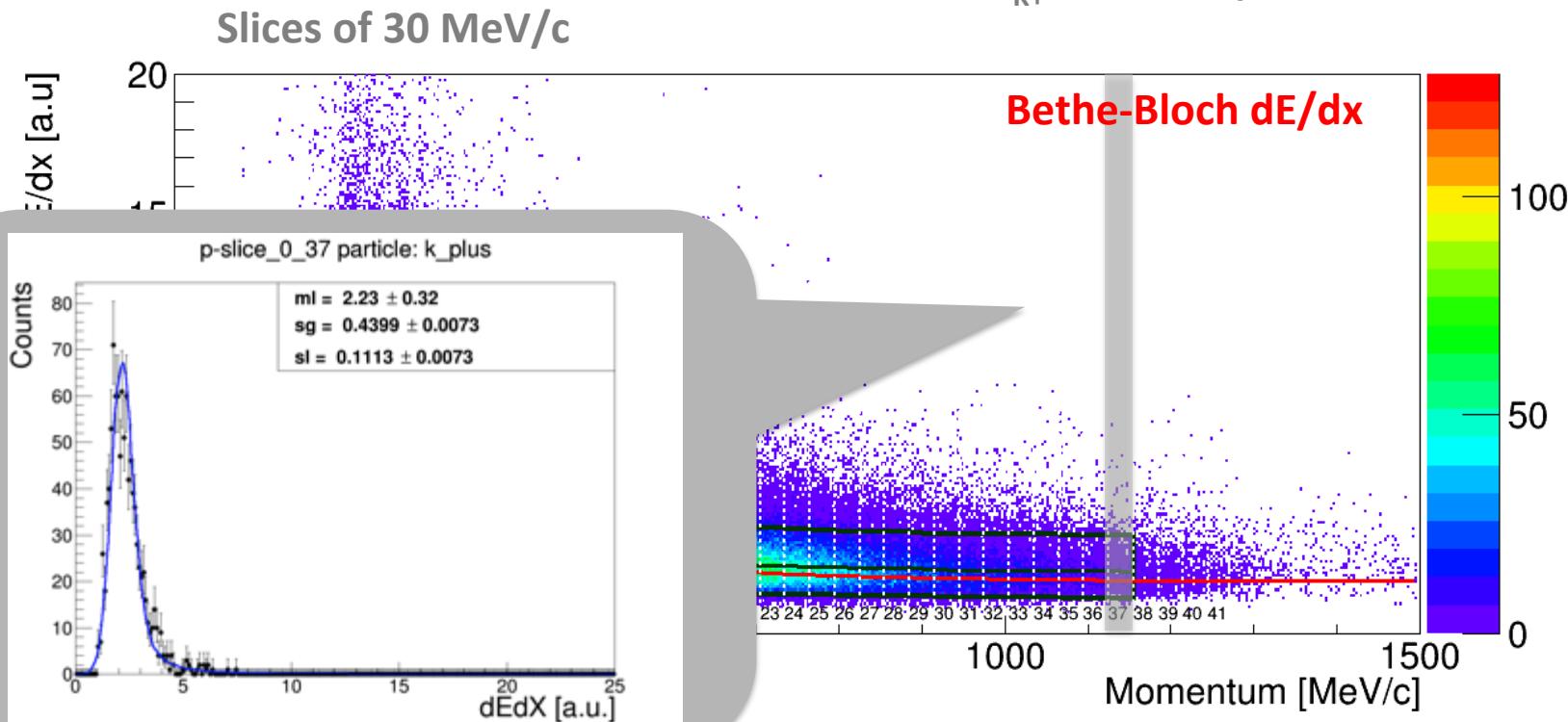


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System 0

SELECTION of Kaons:  
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