

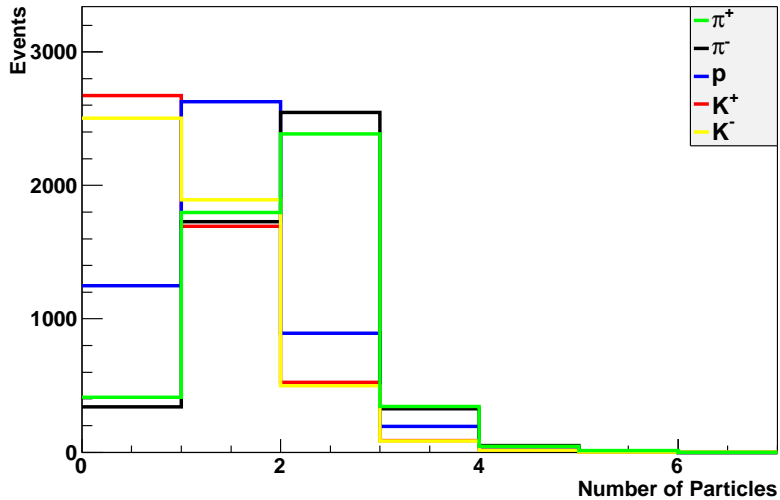
# b1 pi plots

Nathan Sparks

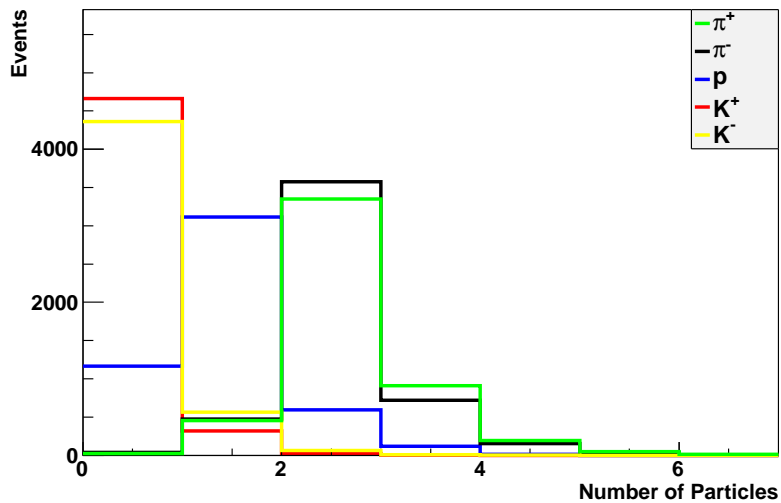
Florida State University, Tallahassee, Florida

GlueX Physics Meeting  
09/27/2010

# Normal PID



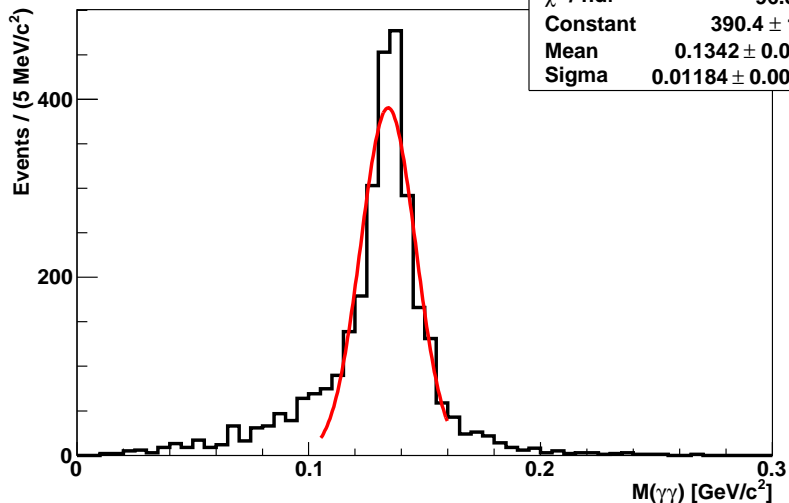
# PID Force Truth



# PID Force Truth

Mass of  $\pi^0$  Meson

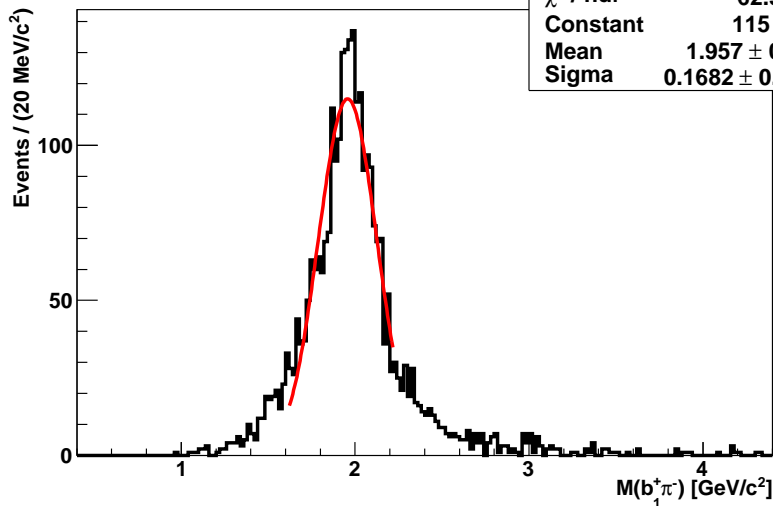
Integral	2961
$\chi^2 / \text{ndf}$	96.8 / 8
Constant	$390.4 \pm 11.9$
Mean	$0.1342 \pm 0.0003$
Sigma	$0.01184 \pm 0.00030$



# PID Force Truth

Mass of X(2000) Meson

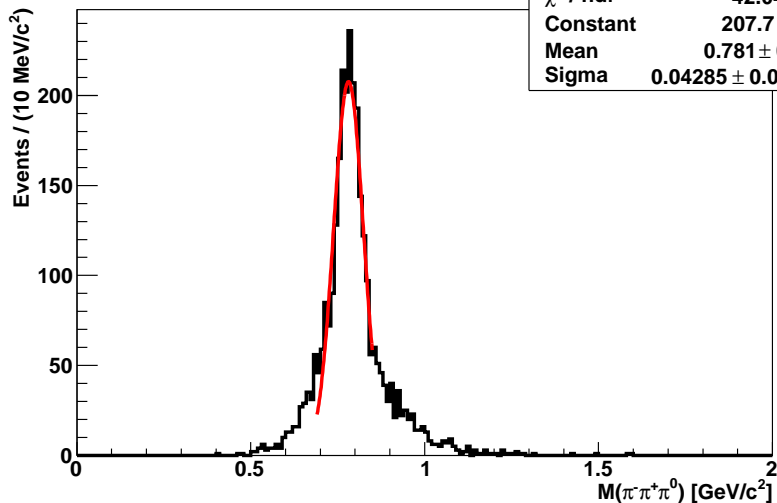
Integral	2956
$\chi^2 / \text{ndf}$	62.5 / 27
Constant	$115 \pm 3.4$
Mean	$1.957 \pm 0.004$
Sigma	$0.1682 \pm 0.0051$



# PID Force Truth

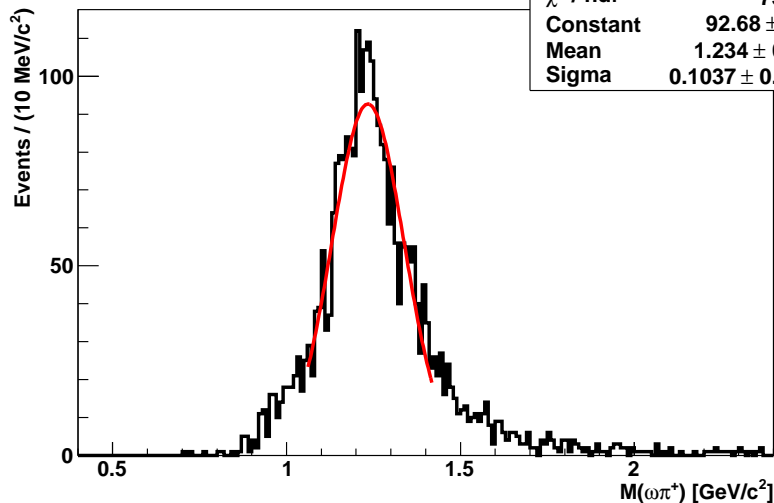
Mass of  $\omega$  Meson

Integral	2961
$\chi^2 / \text{ndf}$	42.04 / 13
Constant	$207.7 \pm 6.4$
Mean	$0.781 \pm 0.001$
Sigma	$0.04285 \pm 0.00132$



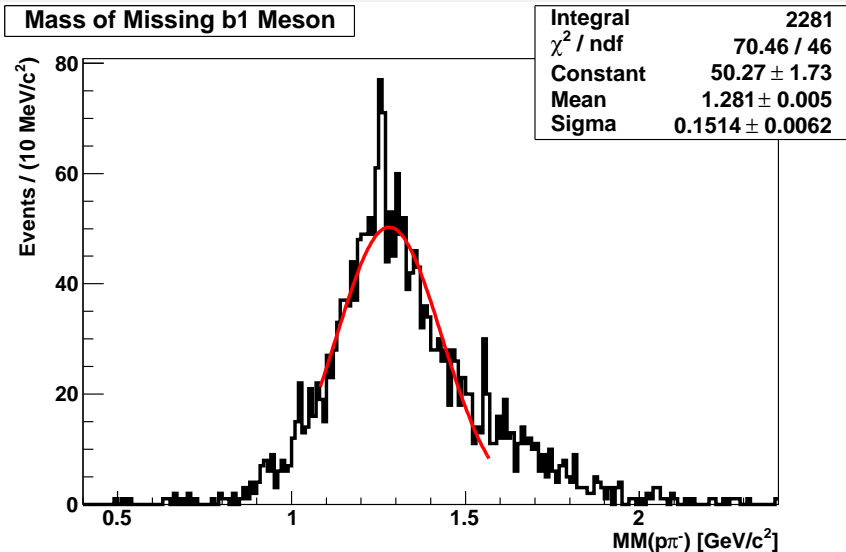
# PID Force Truth

Mass of b1 Meson



Integral	2943
$\chi^2 / \text{ndf}$	73 / 33
Constant	$92.68 \pm 2.76$
Mean	$1.234 \pm 0.003$
Sigma	$0.1037 \pm 0.0032$

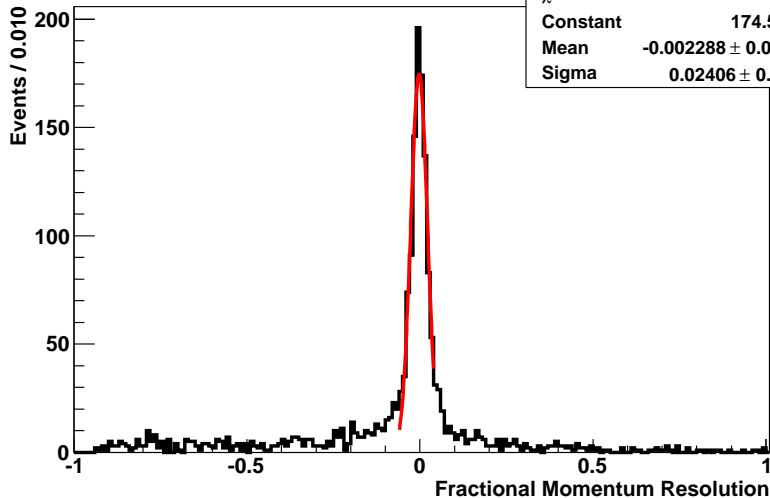
# PID Force Truth





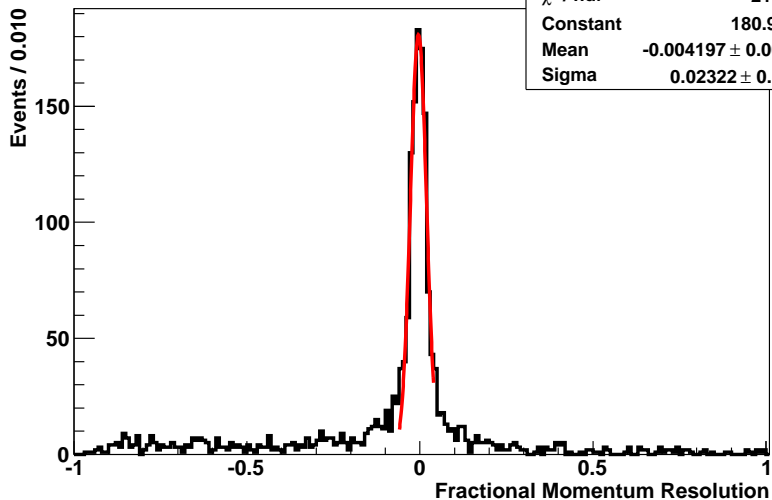
# PID Force Truth

$\pi^+$  from  $\rho$  Decay

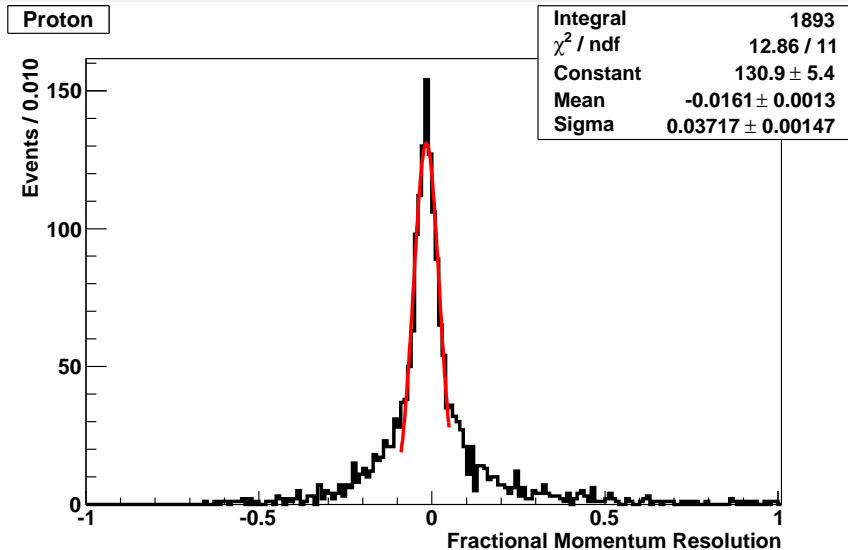


# PID Force Truth

$\pi^+$  from b1 Decay

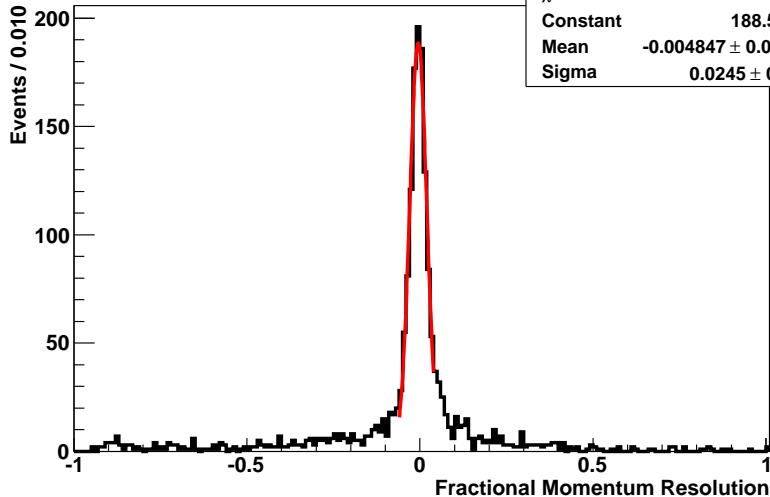


# PID Force Truth



# PID Force Truth

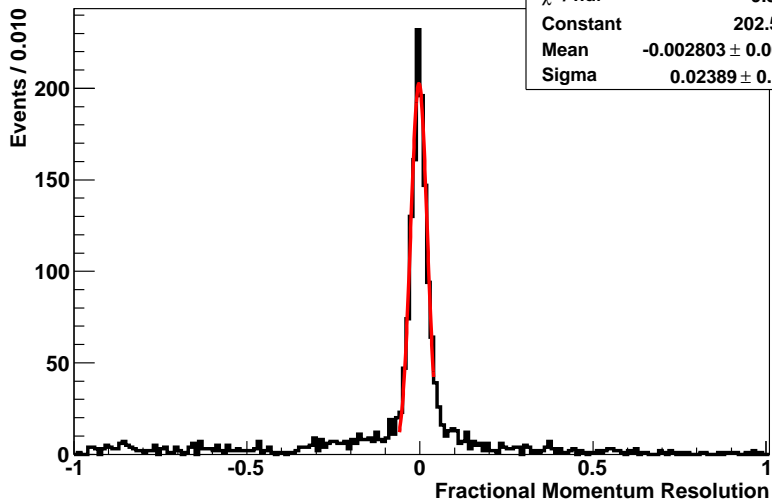
$\pi^-$  from  $\rho$  Decay



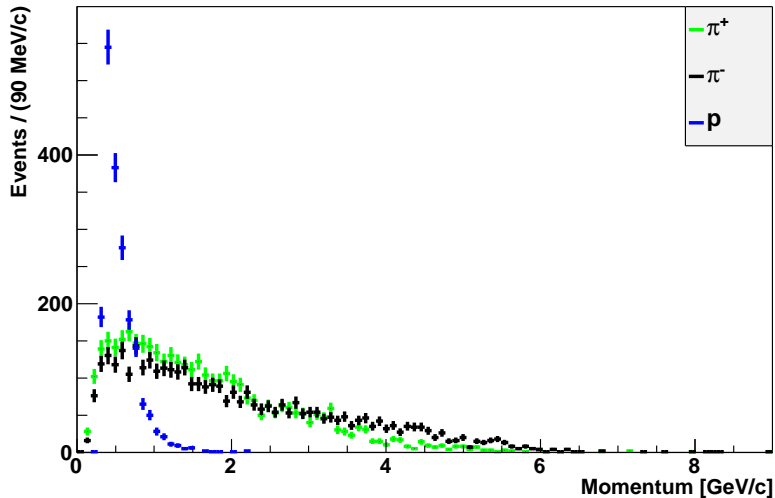
Integral	1795
$\chi^2 / \text{ndf}$	5.616 / 7
Constant	$188.5 \pm 7.7$
Mean	$-0.004847 \pm 0.000848$
Sigma	$0.0245 \pm 0.0009$

# PID Force Truth

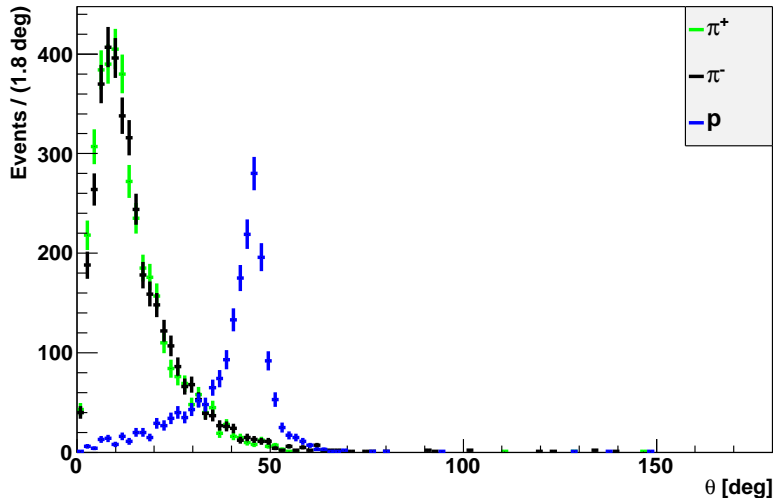
$\pi^-$  from X Decay



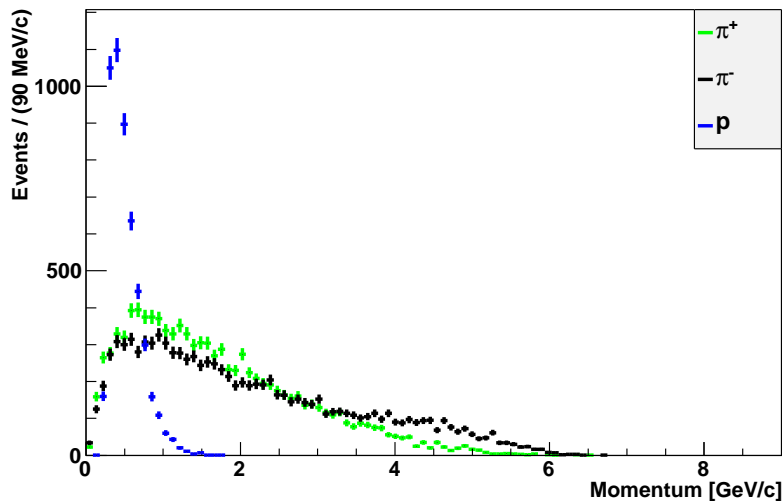
## PID Force Truth: Accepted Momentum Dist.



## PID Force Truth: Accepted Theta Dist.

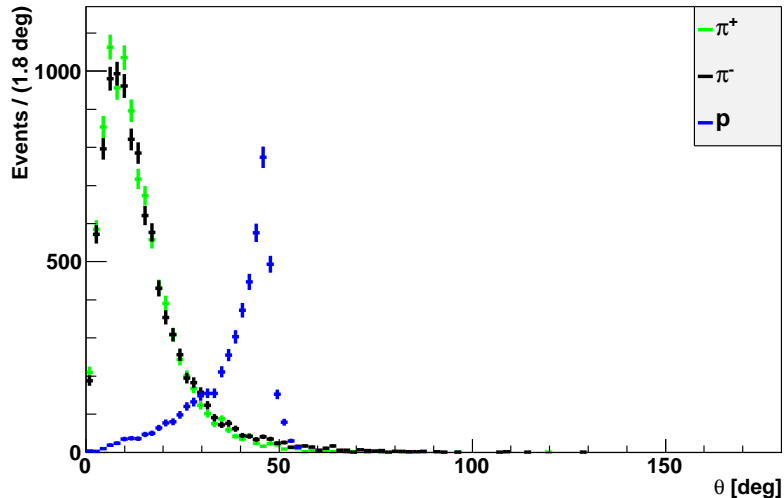


## PID Force Truth: Generated Momentum Dist.

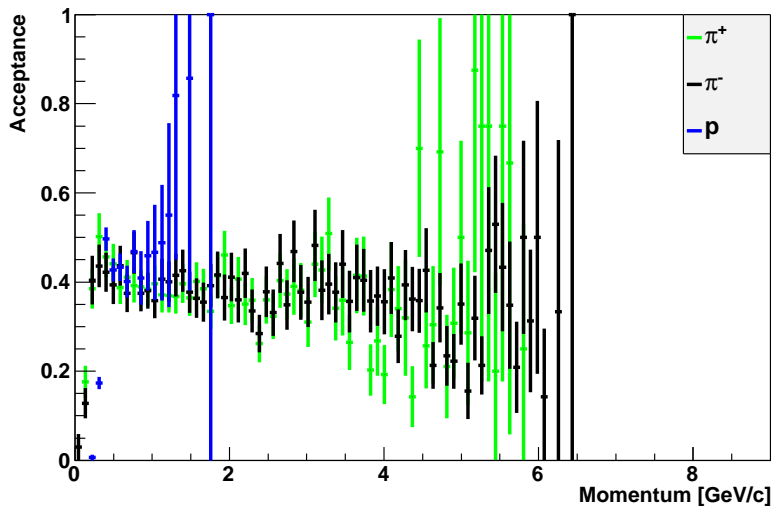




## PID Force Truth: Generated Theta Dist.



# PID Force Truth: Acceptance in Momentum



# PID Force Truth: Acceptance in Theta

