

LOW ENERGY – LOW POWER OPERATION TARGET

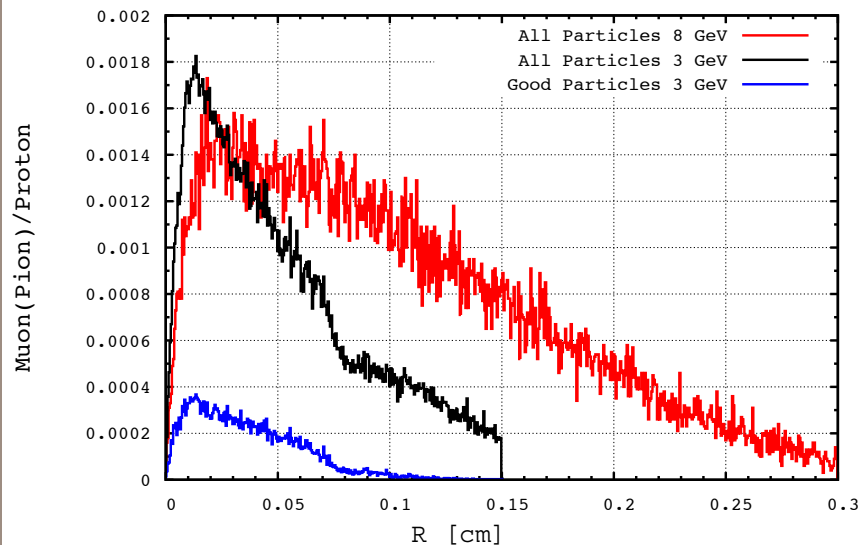
Hisham Sayed

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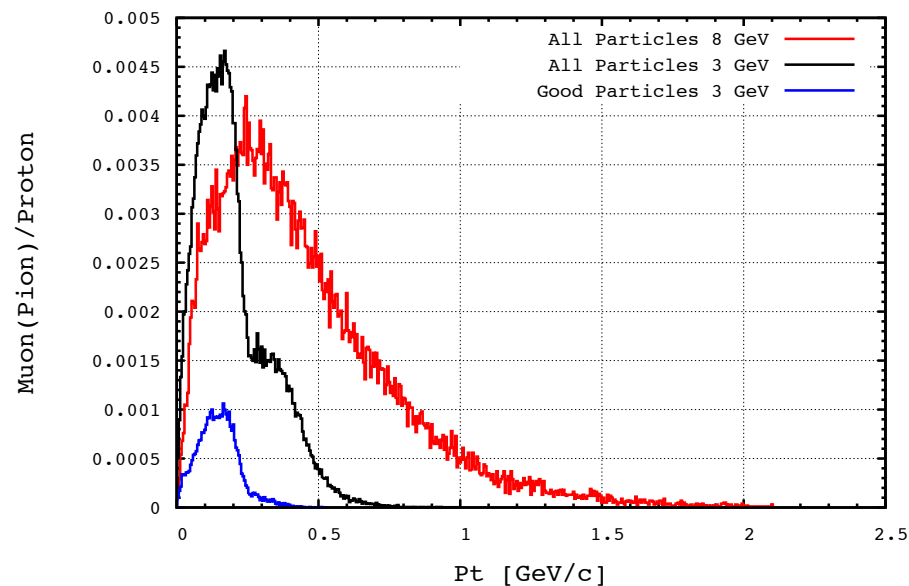
Aug 14, 2013

# PARTICLE DISTRIBUTION

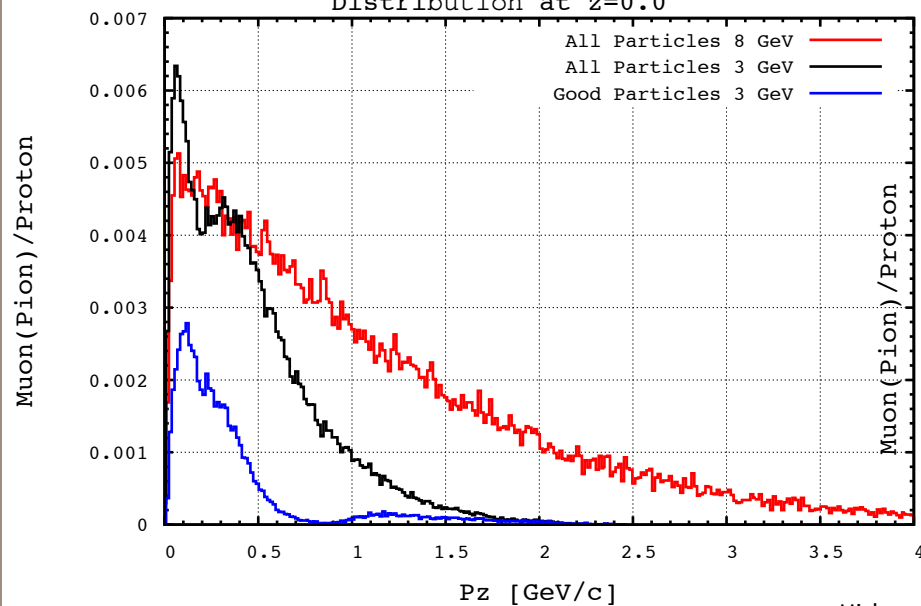
Distribution at  $z=0.0$



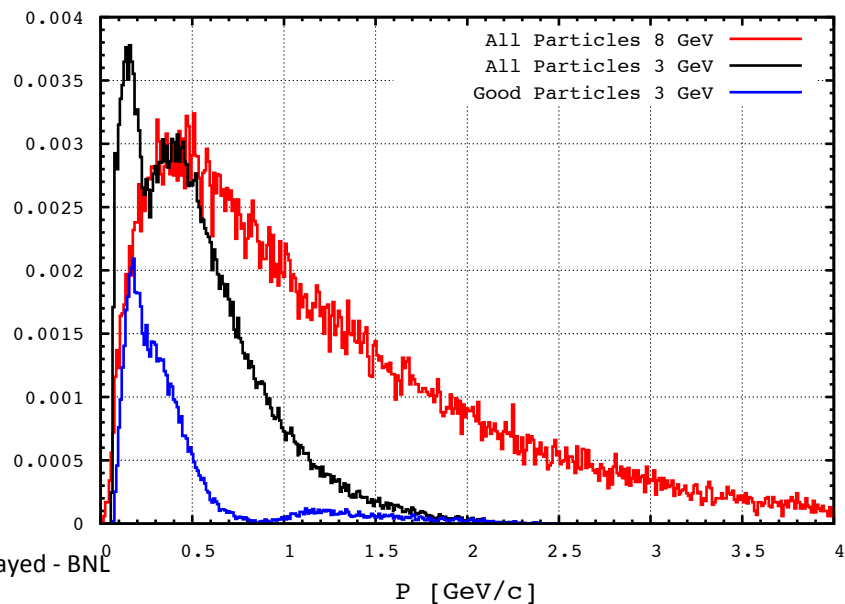
Distribution at  $z=0.0$

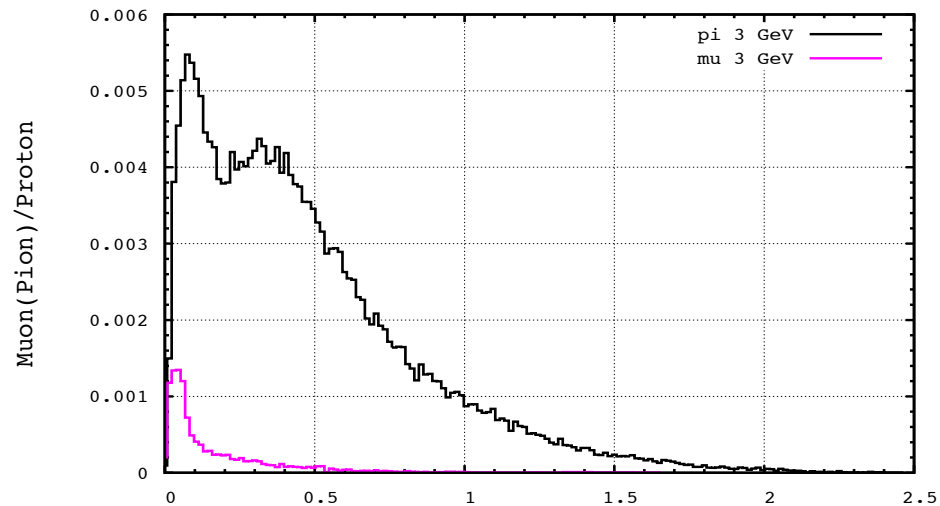
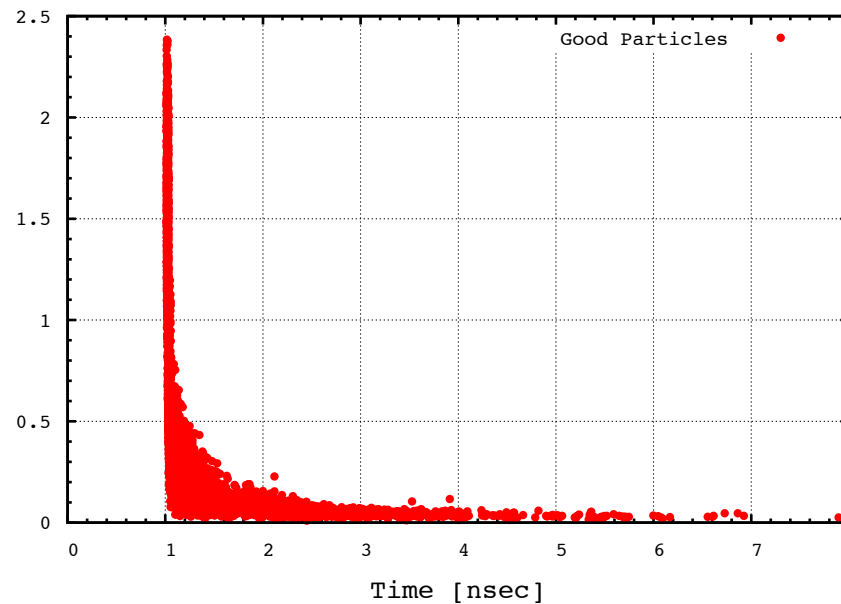
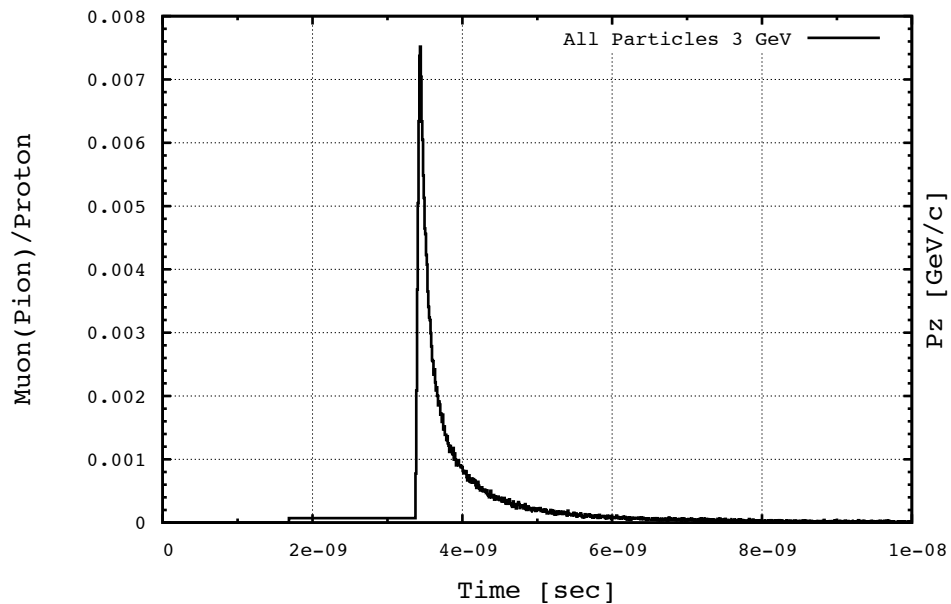


Distribution at  $z=0.0$

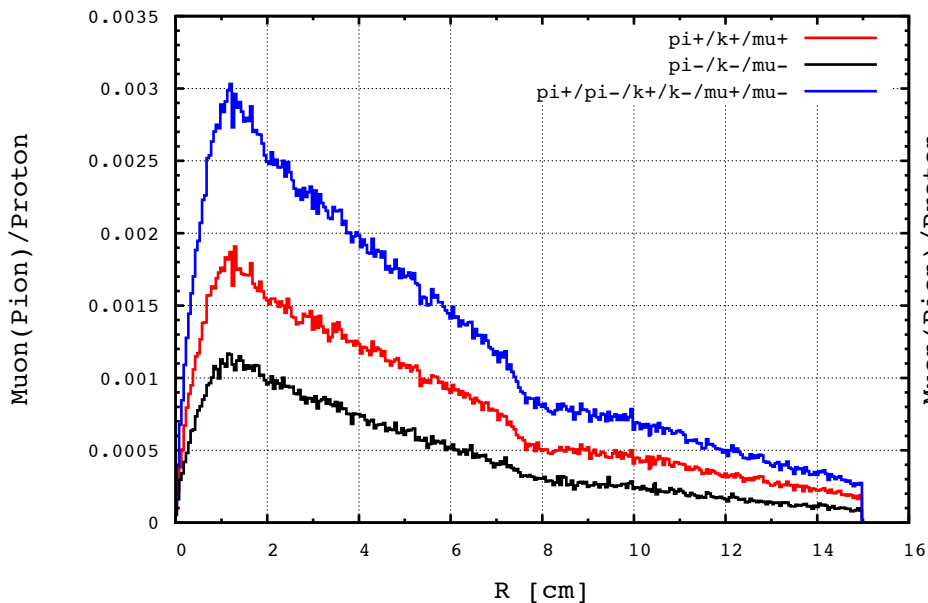
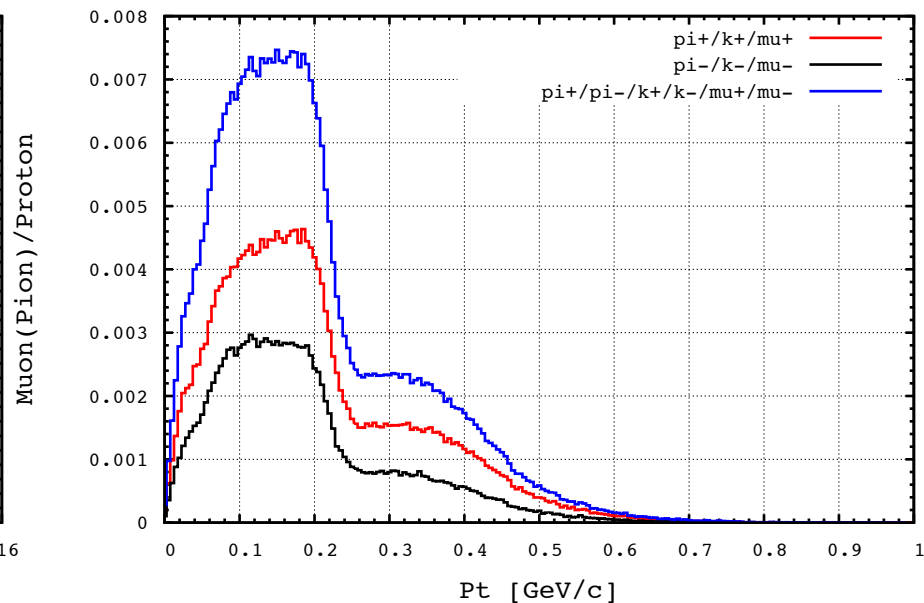
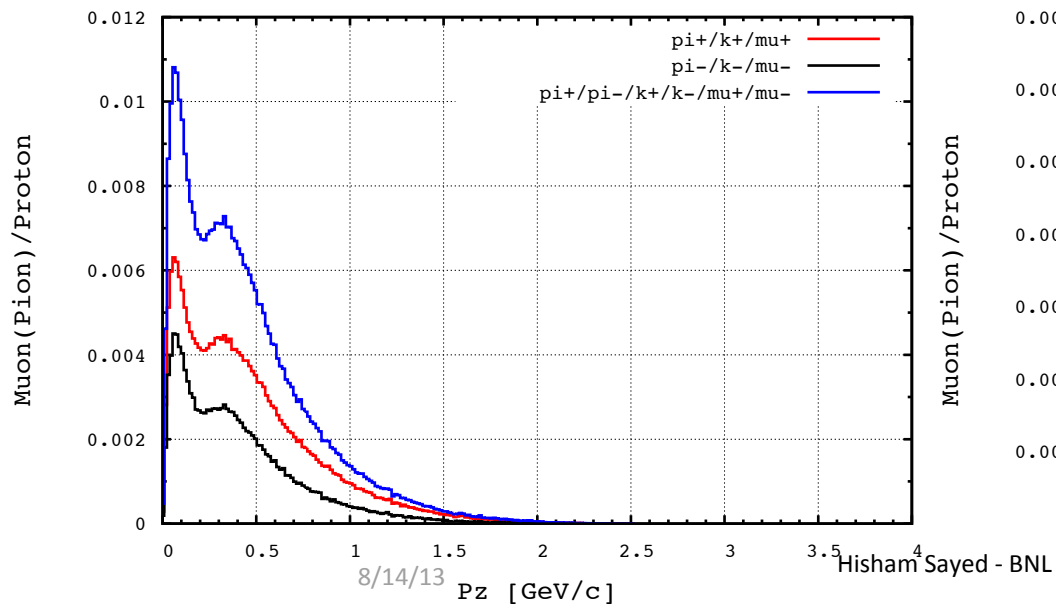
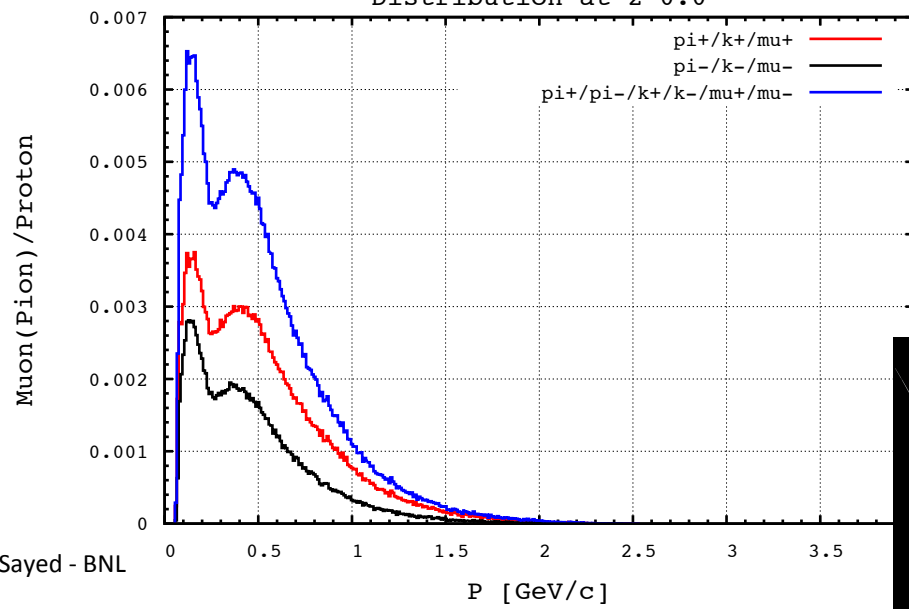


Distribution at  $z=0.0$



Distribution at  $z=0.0$ Distribution at  $z=0.0$  $P_z$  [GeV/c]Distribution at  $z=0.0$ 

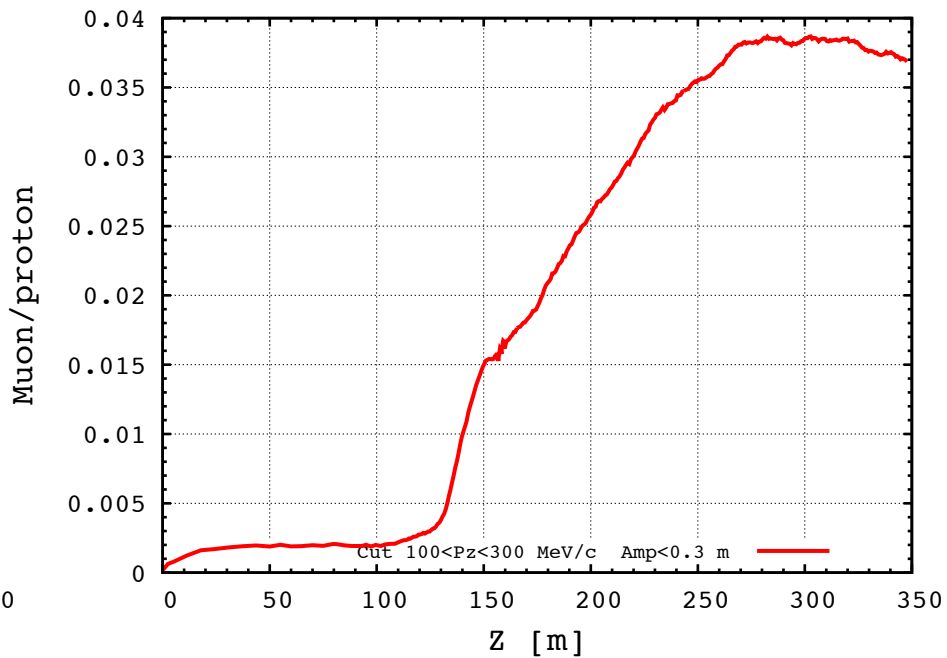
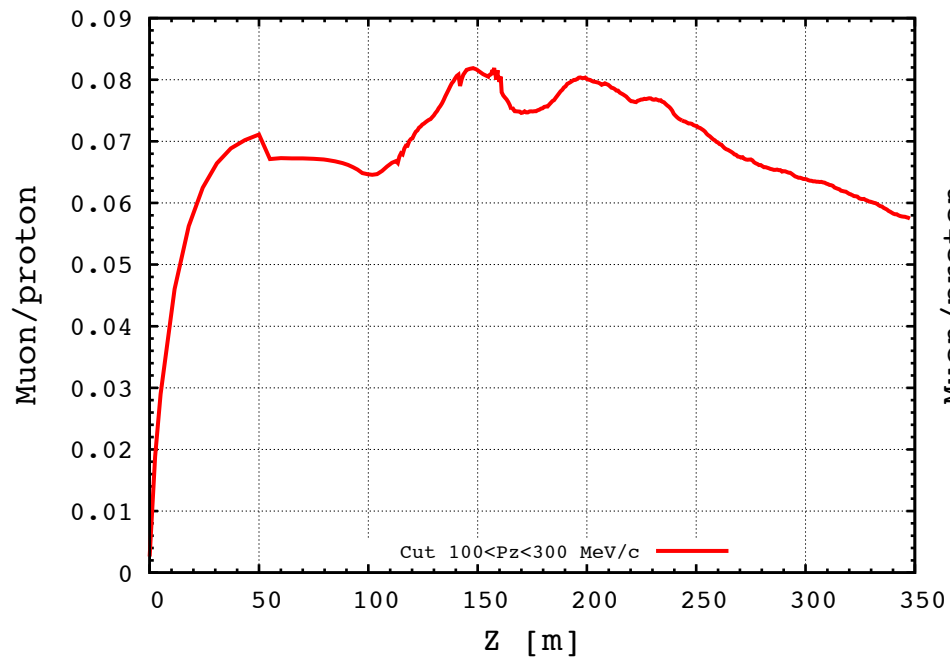
# $\pi^+/\pi^-$ DISTRIBUTION

Distribution at  $z=0.0$ Distribution at  $z=0.0$ Distribution at  $z=0.0$ Distribution at  $z=0.0$ 

8/14/13

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# OPTIMIZED CAPTURE/FRONT END



# MUON CAPTURE

Z	$N(\text{muons+pions})/N_p/\text{GeV}$
0	0.124 (mu+ & mu-) no cuts
50	0.017 (mu+ only) 100 MeV < p_z < 300 MeV B_z = 20-1.5 T long taper (MARS)
50 Optimized capture (ICOOOL)	0.0245 (mu+ only) 100 MeV < p_z < 300 MeV B_z = 20-2.5 T short taper