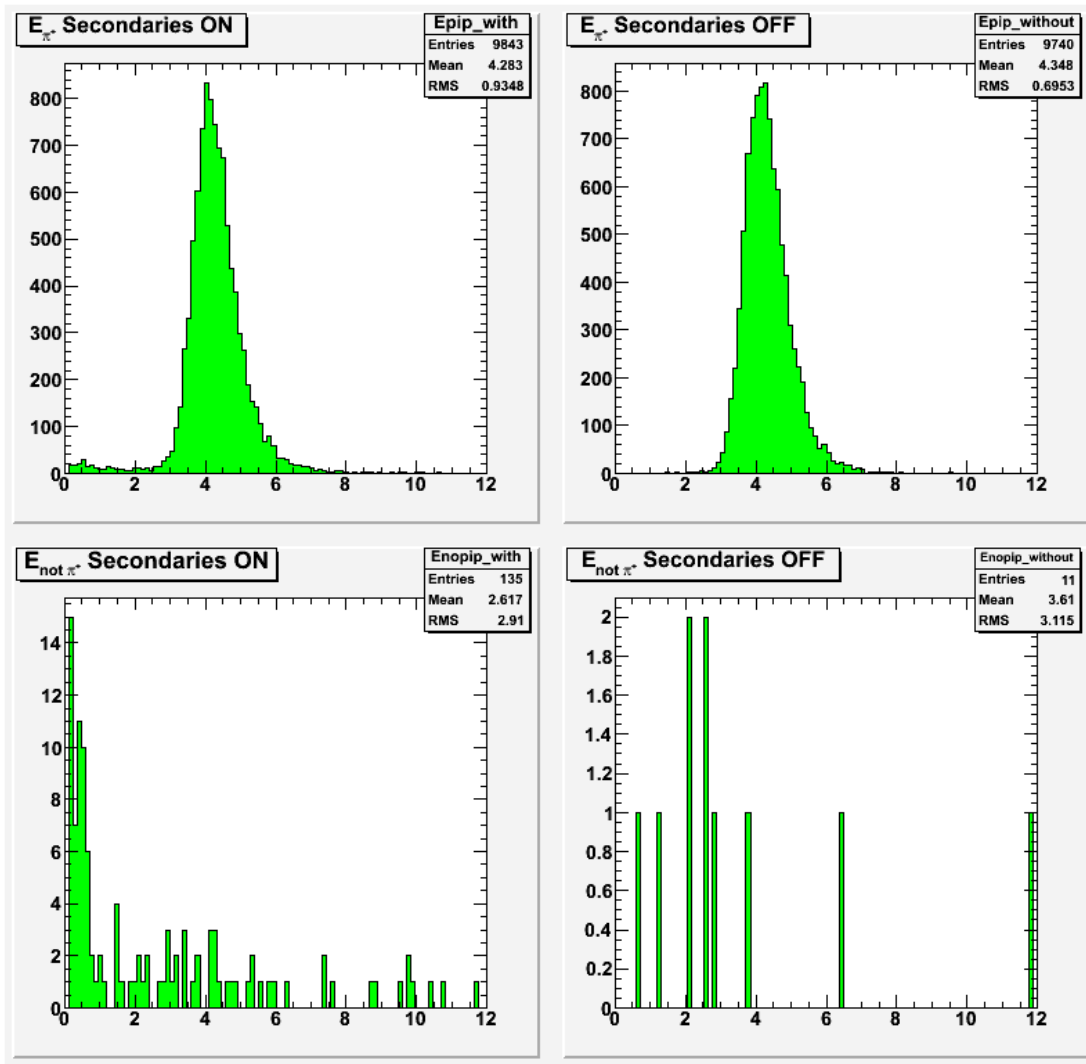# CPP Acceptance

Nov. 2, 2012
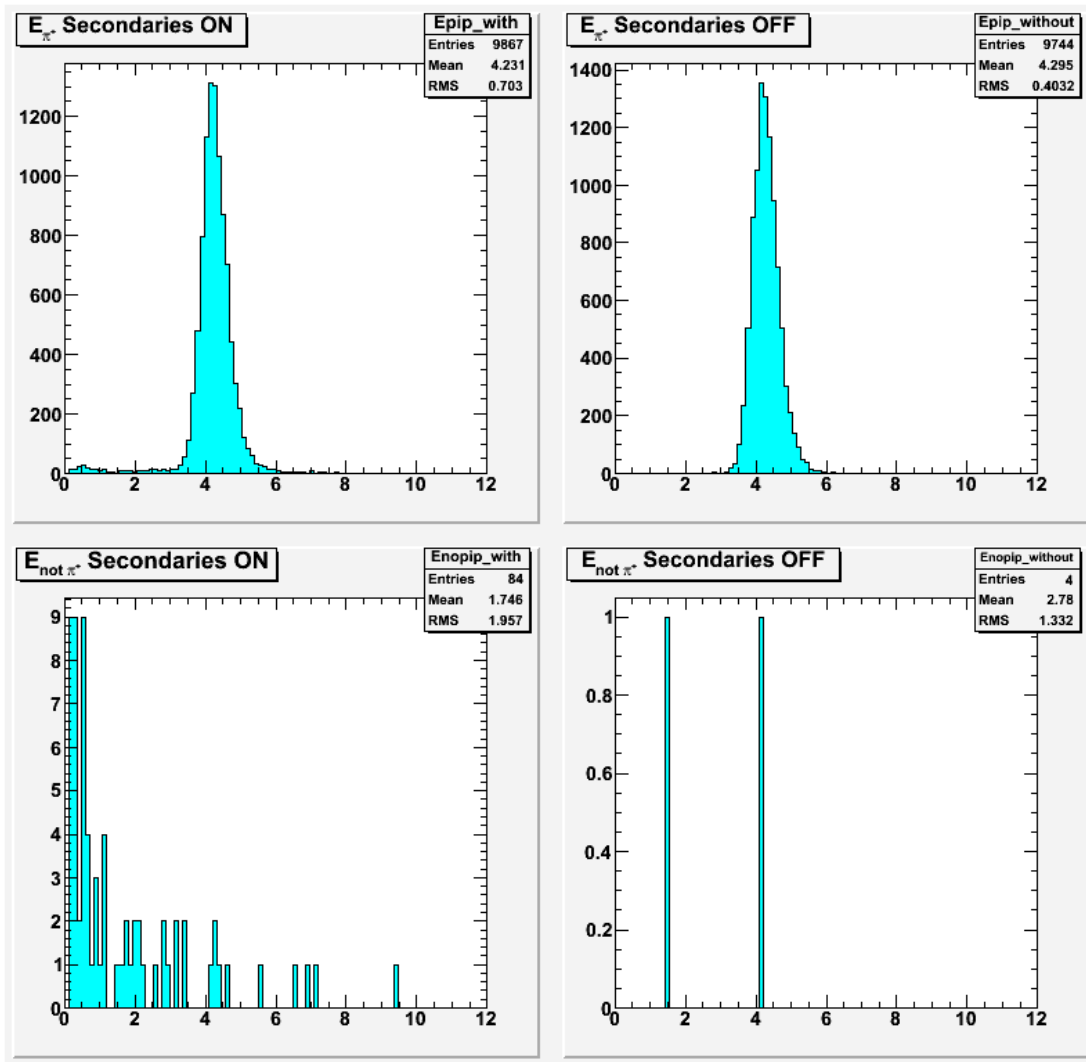
David Lawrence   - JLab

pi+ energy with and without secondaries

- svn revision 9877

- 4.25GeV/c π^+ at 1.5°

- janaroot plugin used
  - *DChargedTrackHypothesis* objects
  - Multiple mass hypotheses fit (pi, K, proton)
  - Only hypothesis with largest FOM is plotted
  - Top plots are cut on particle type being pi+ (PID[0]==8)
  - Bottom plots are cut on particle type not being pi+ (PID[0]!=8)

- No vertex constraint applied

n.b. when 2nd, 3rd,… best FOMs are plotted, a

pi+ energy with and without secondaries

- svn revision 9877

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- Vertex constraint at z=65cm applied
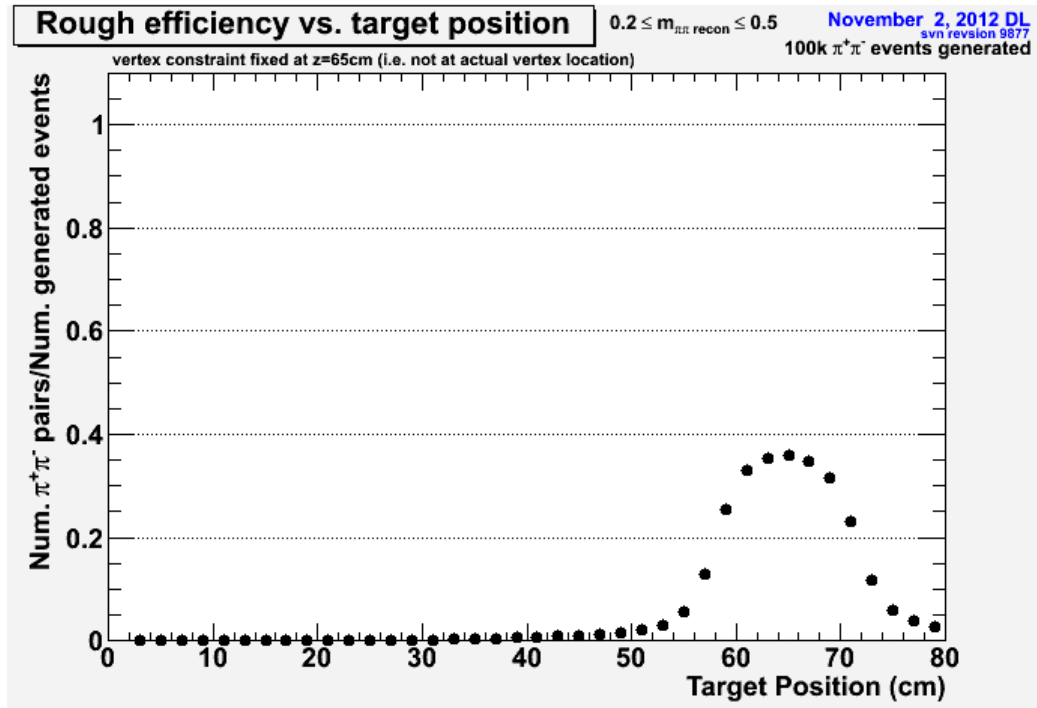
Acceptance vs. z (sort of…but not really)

Rough efficiency vs. target position $0.2 \leq m_{\pi\pi \, recon} \leq 0.5$ November 2, 2012 DL svn revsion 9877 100k $\pi^+\pi^-$ events generated

vertex constraint fixed at z=65cm (i.e. not at actual vertex location)

- svn revision 9877

- Same sample of 100k $\pi^+\pi^-$ events simulated and reconstructed at different z-locations ranging from z=1cm to z=79cm (at 2cm intervals)

- Vertex constraint applied
  - Z-position of constraint was fixed at z=65

- Nominal GlueX target geometry used
  - LH$_2$ GlueX target is 30cm long and positioned from z=50cm to z=80cm