

Acceptance Study Status

Chao Gu

Acceptance Study

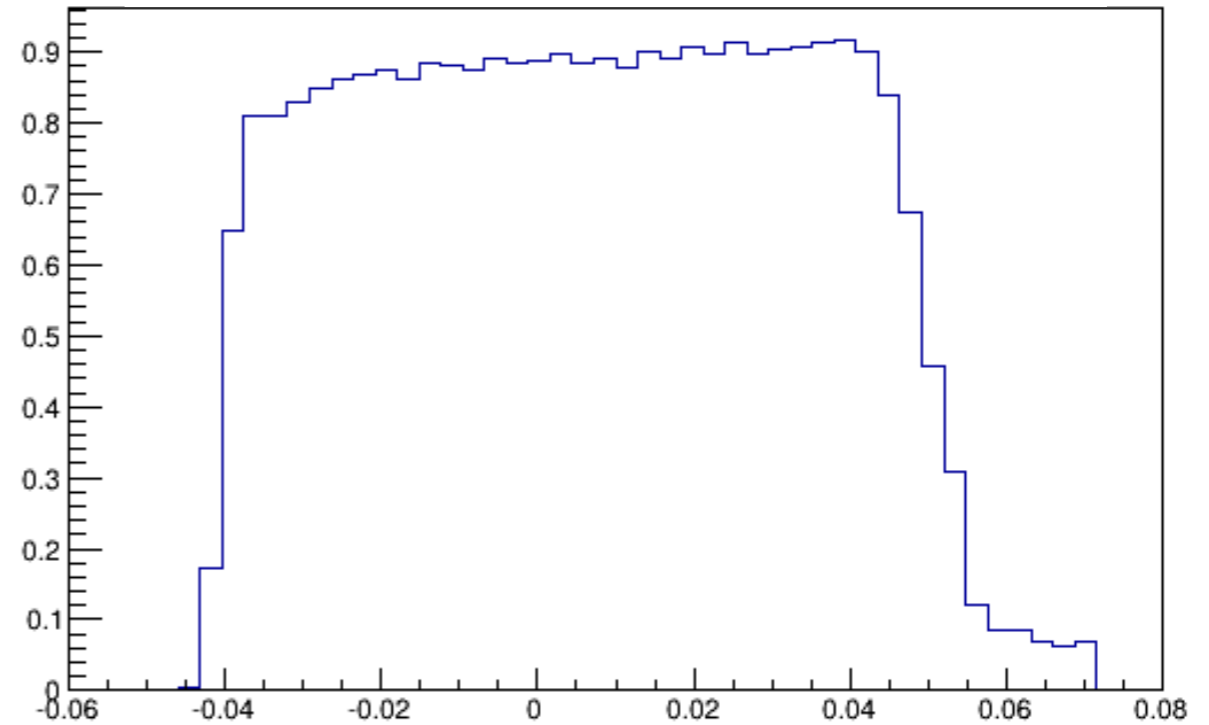
- Check the acceptance in the simulation
- Test with the configuration from run 5879 (carbon target)
 - 1.2 GeV central momentum
 - With and without target field
 - Calculate the acceptance for several different sets of cuts

Acceptance Study

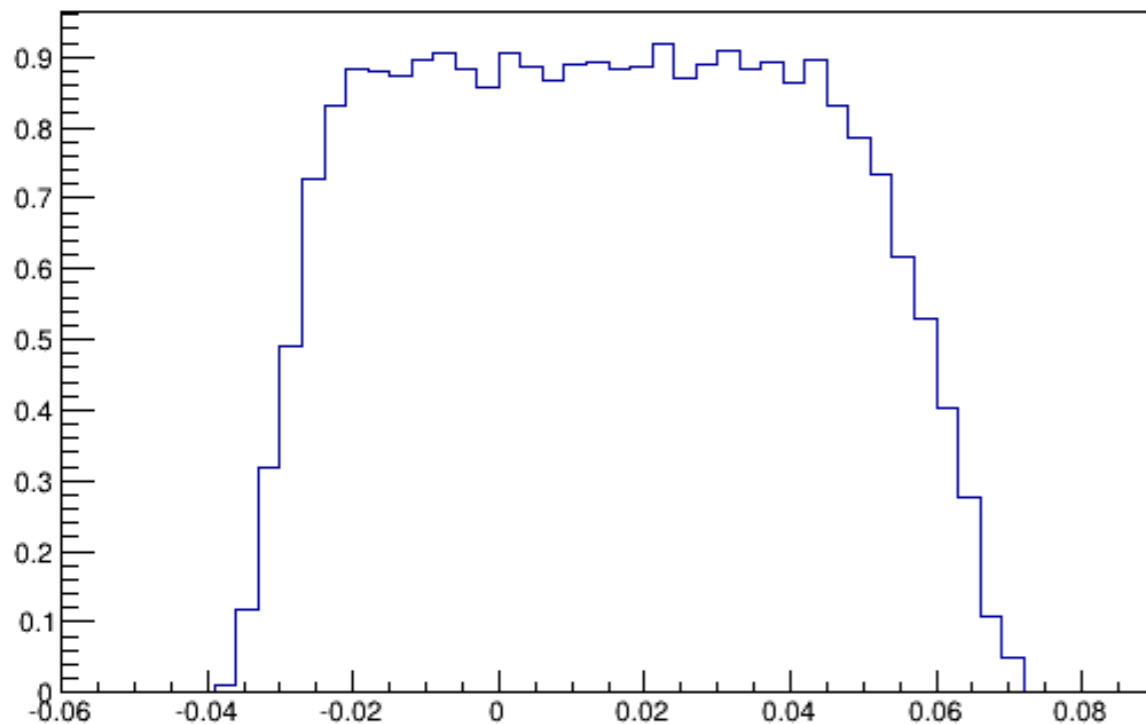
Old Slide
Longitudinal Field

- Cut the center region:
 - $-0.01 < dp < 0.01$
 - $-0.01 < \theta < 0.03$
 - $-0.01 < \phi < 0.01$
- The acceptance of the center region is around 90%

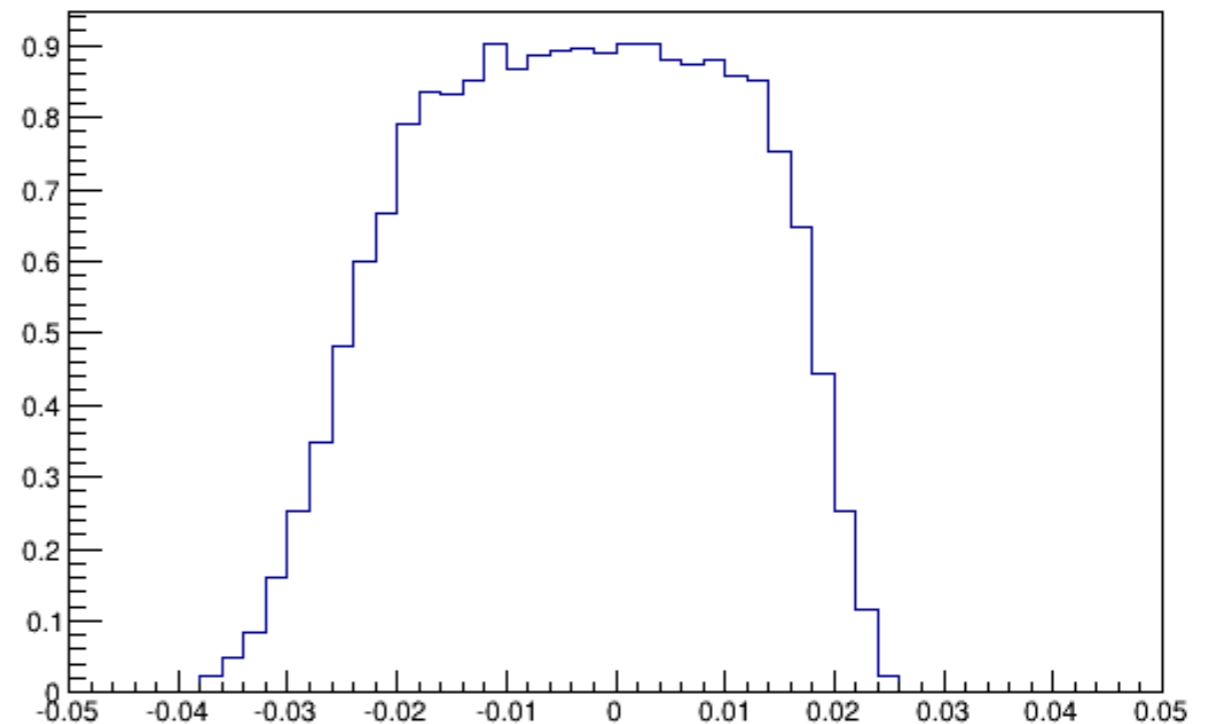
Delta (rad)



Theta (rad)



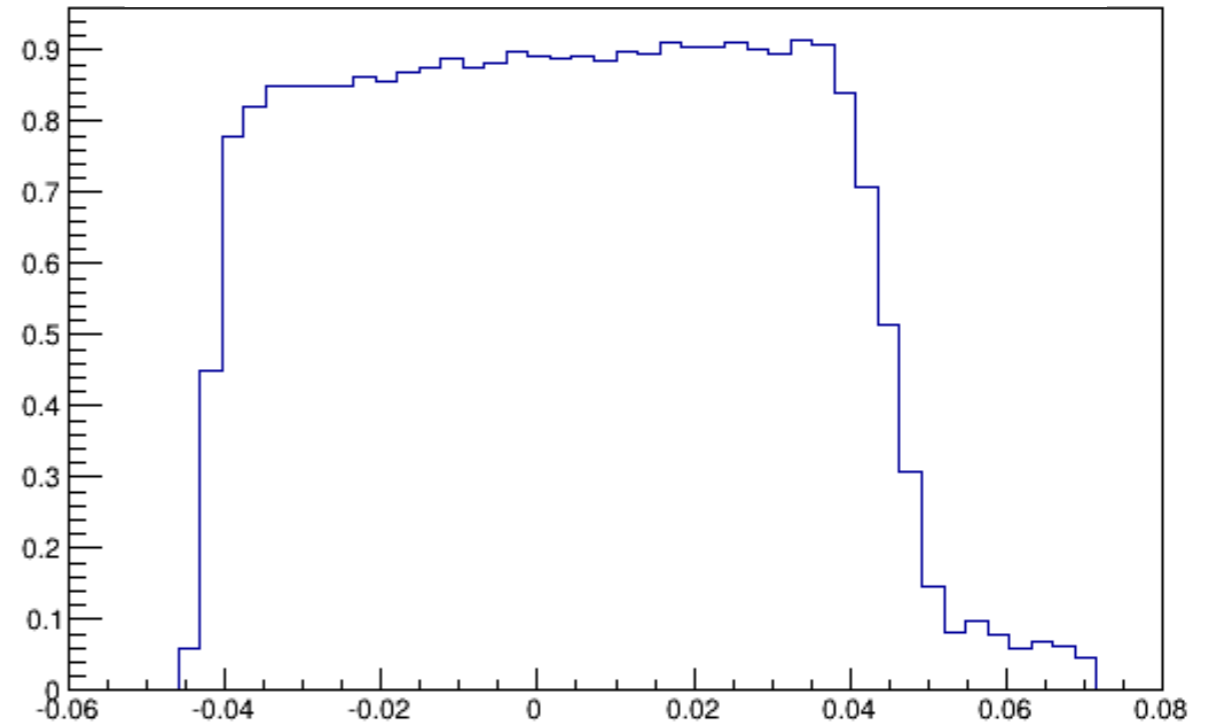
Phi (rad)



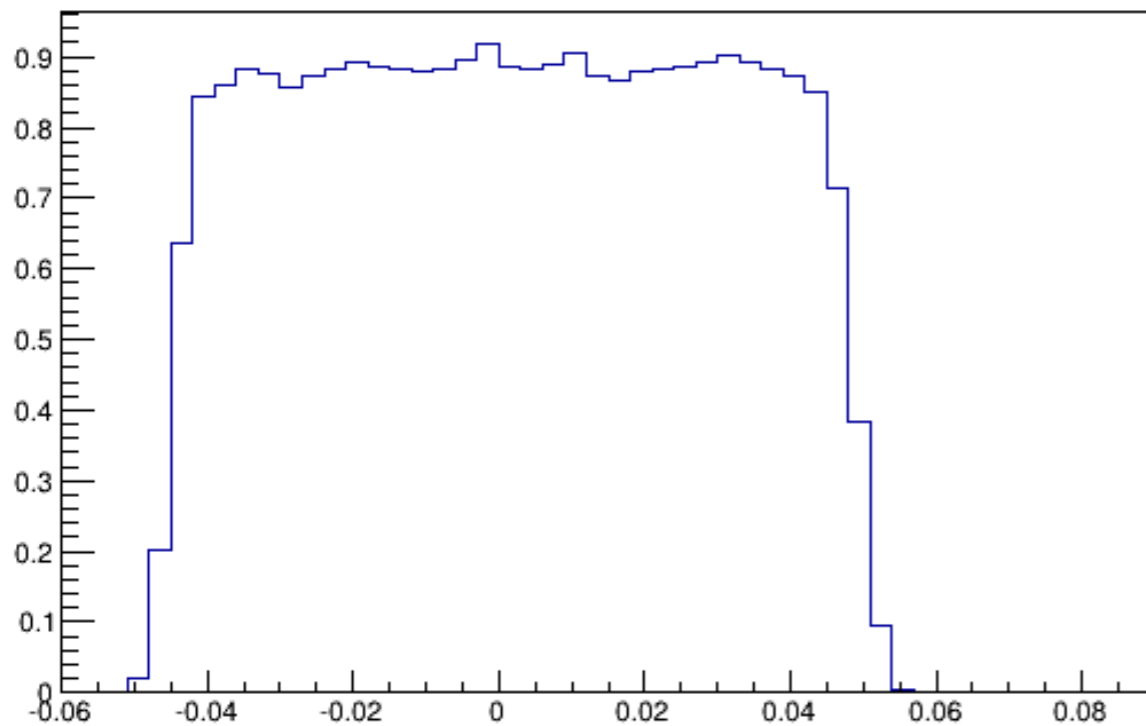
Acceptance Study

- Cut the center region:
 - $-0.01 < dp < 0.01$
 - $-0.02 < \theta < 0.02$
 - $-0.01 < \phi < 0.01$
- No target field with 40-00-16 septum SNAKE model

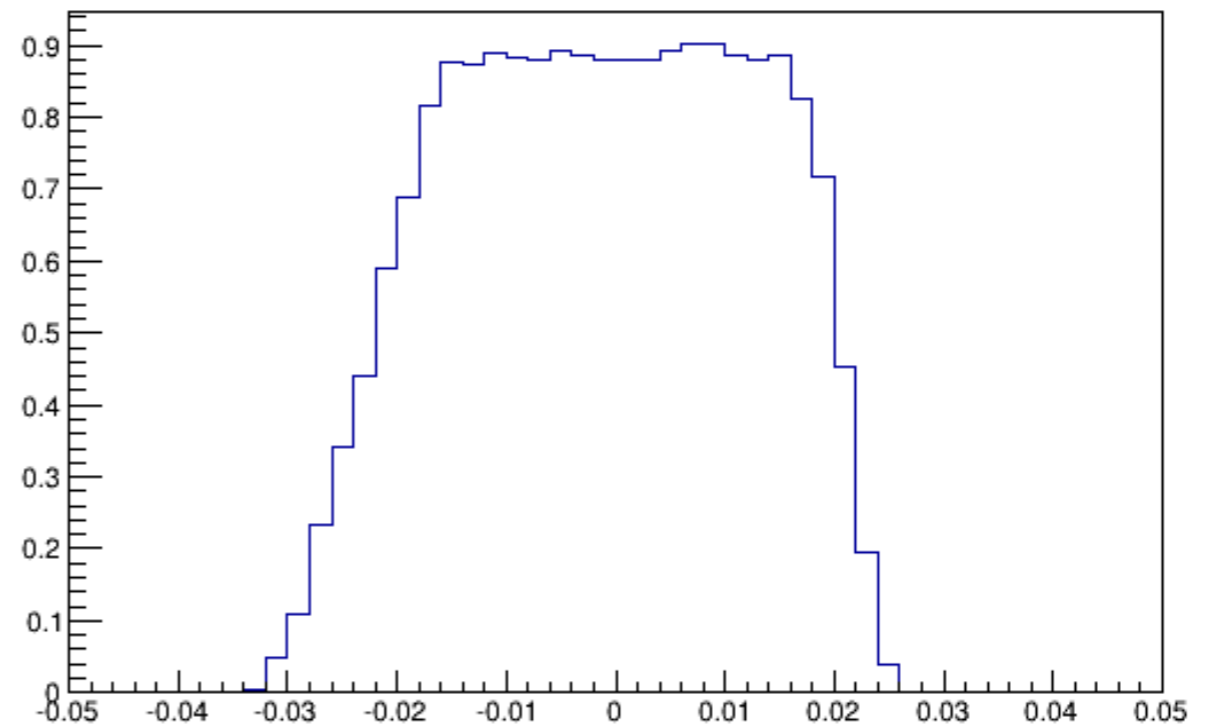
Delta (rad)



Theta (rad)

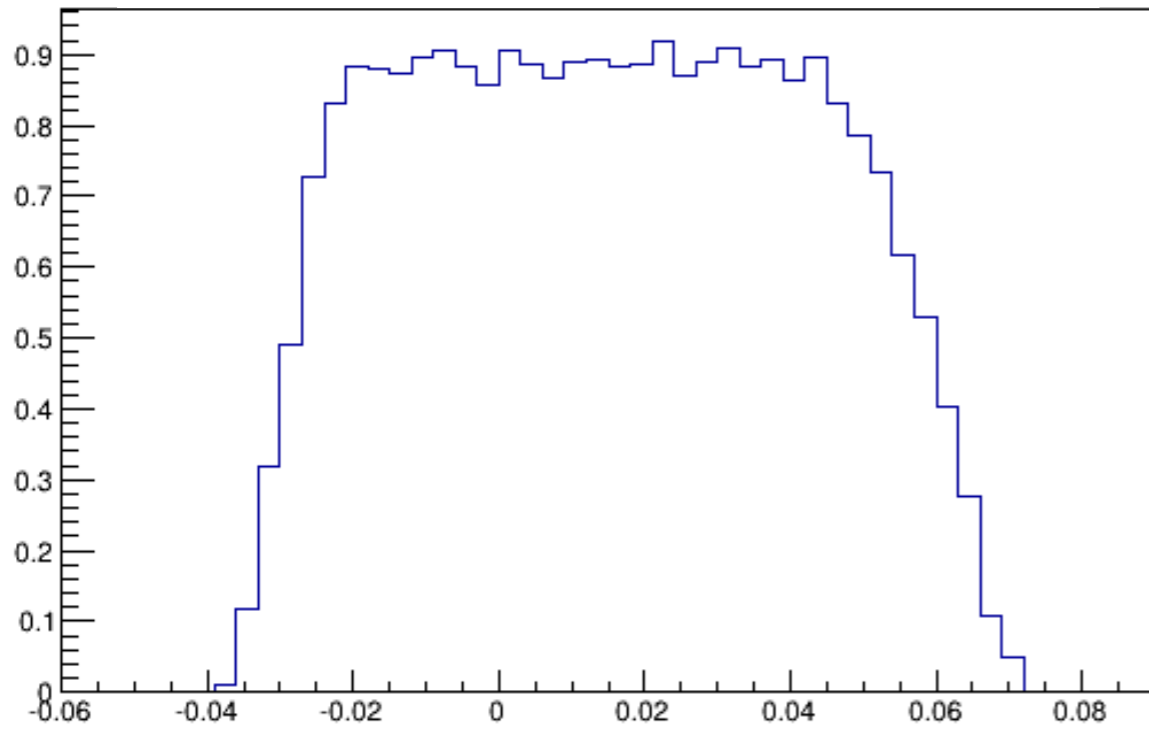


Phi (rad)

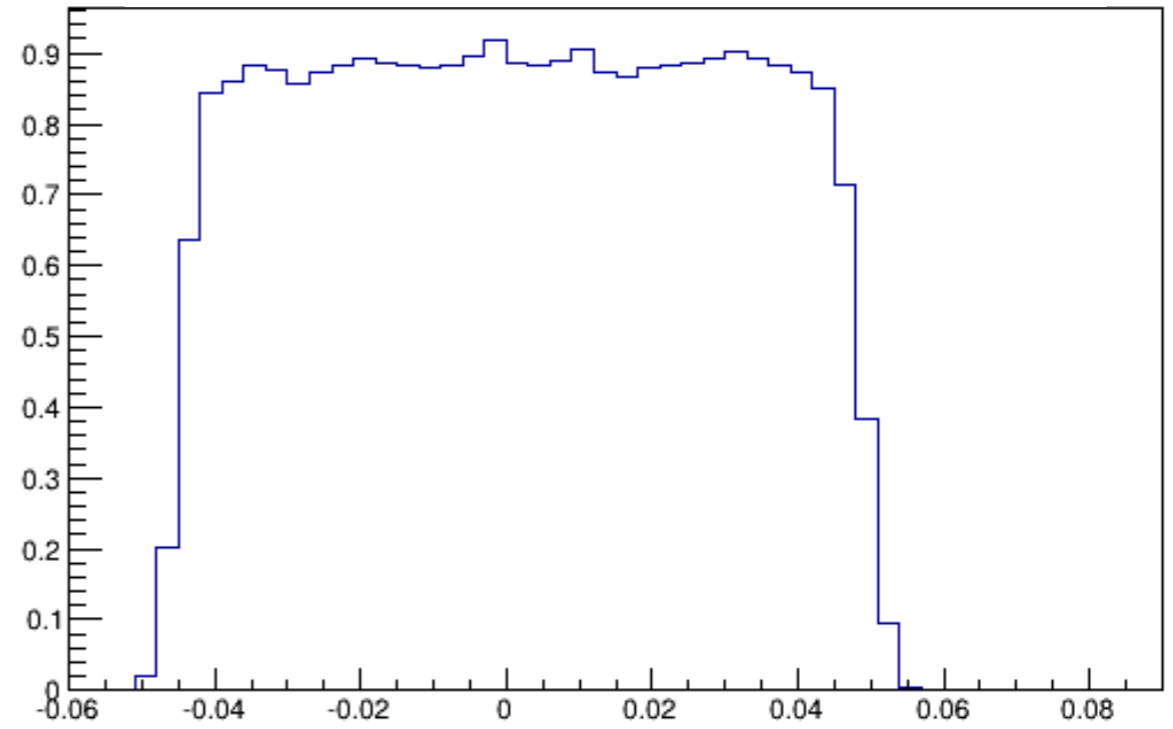


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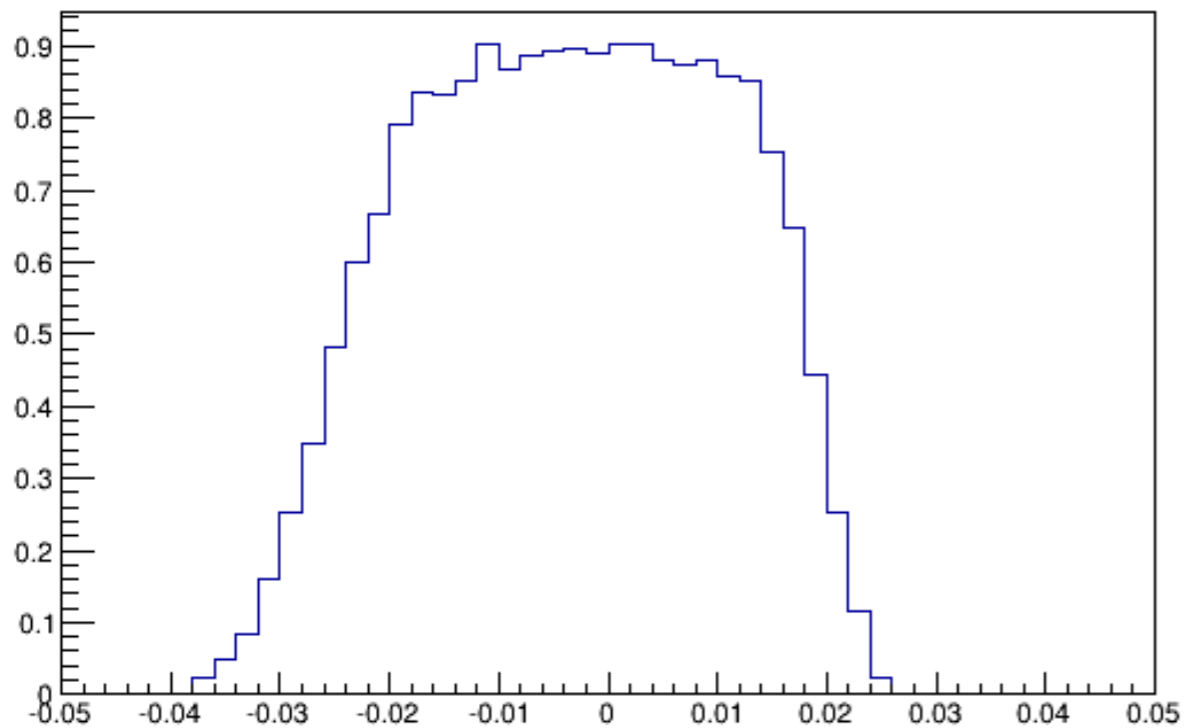
Theta (rad), longitudinal



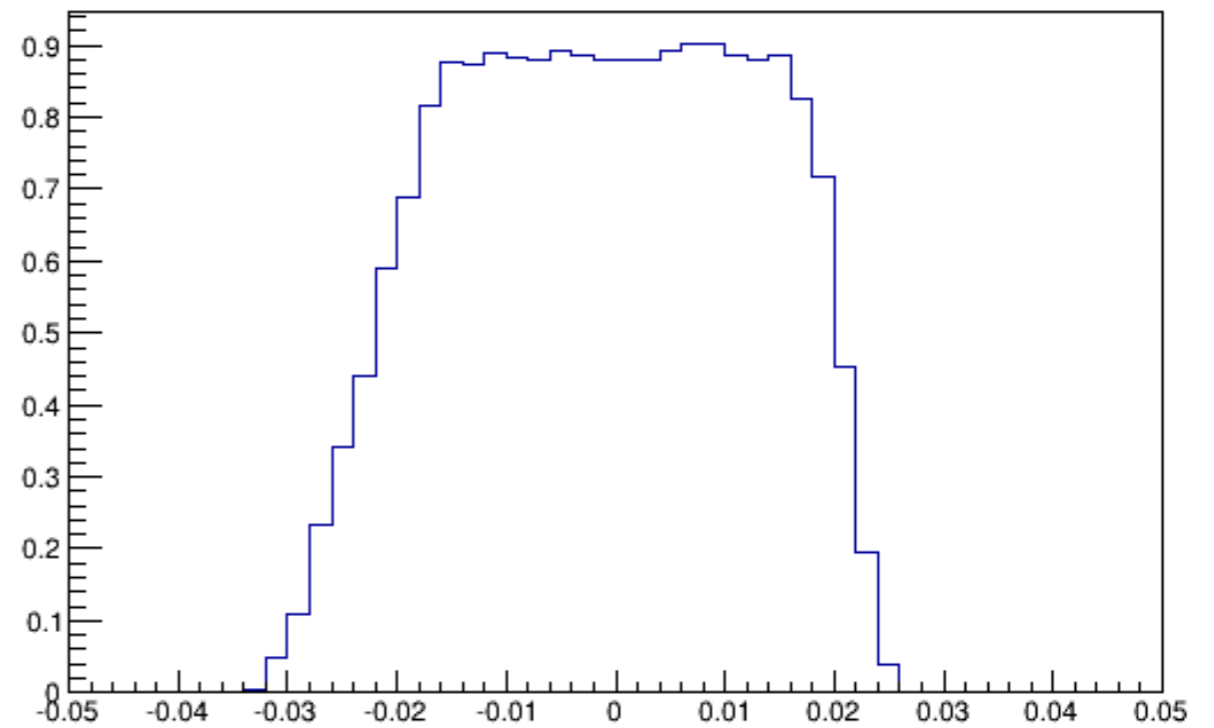
Theta (rad), no field



Phi (rad), longitudinal



Phi (rad), no field

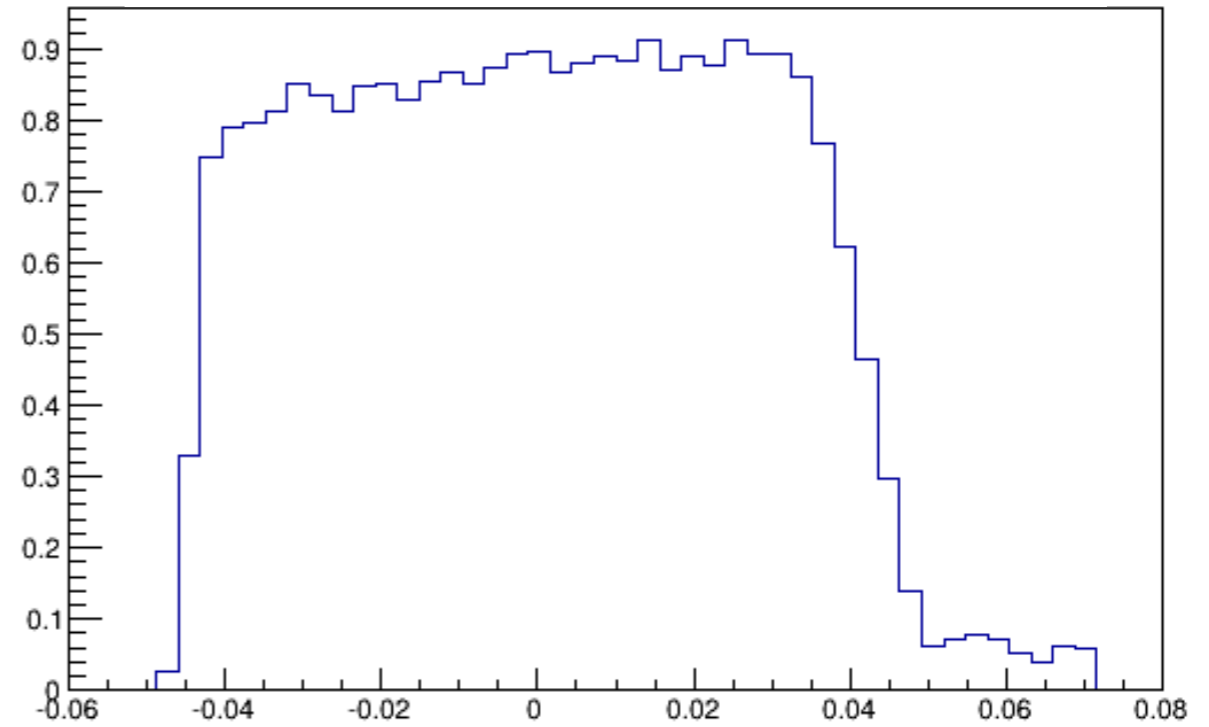


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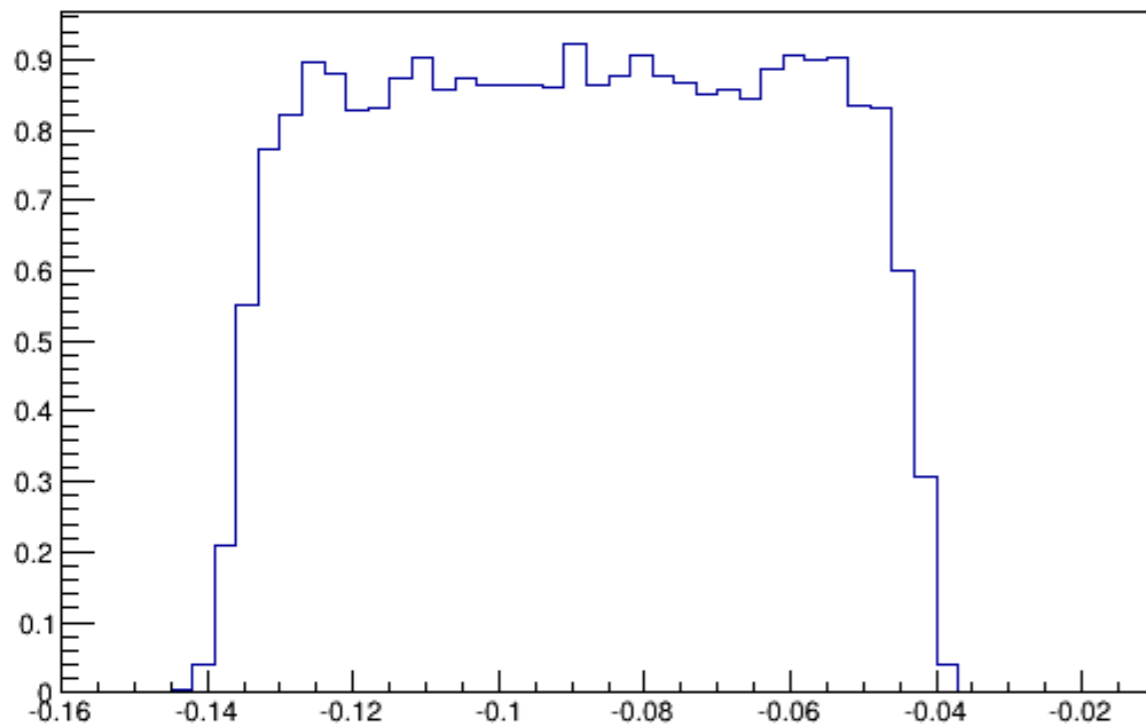
Acceptance Study

- Cut the center region:
 - $-0.01 < dp < 0.01$
 - $-0.11 < \theta < -0.07$
 - $-0.01 < \phi < 0.01$
- 2.5T transverse field with 40-00-16 septum SNAKE model

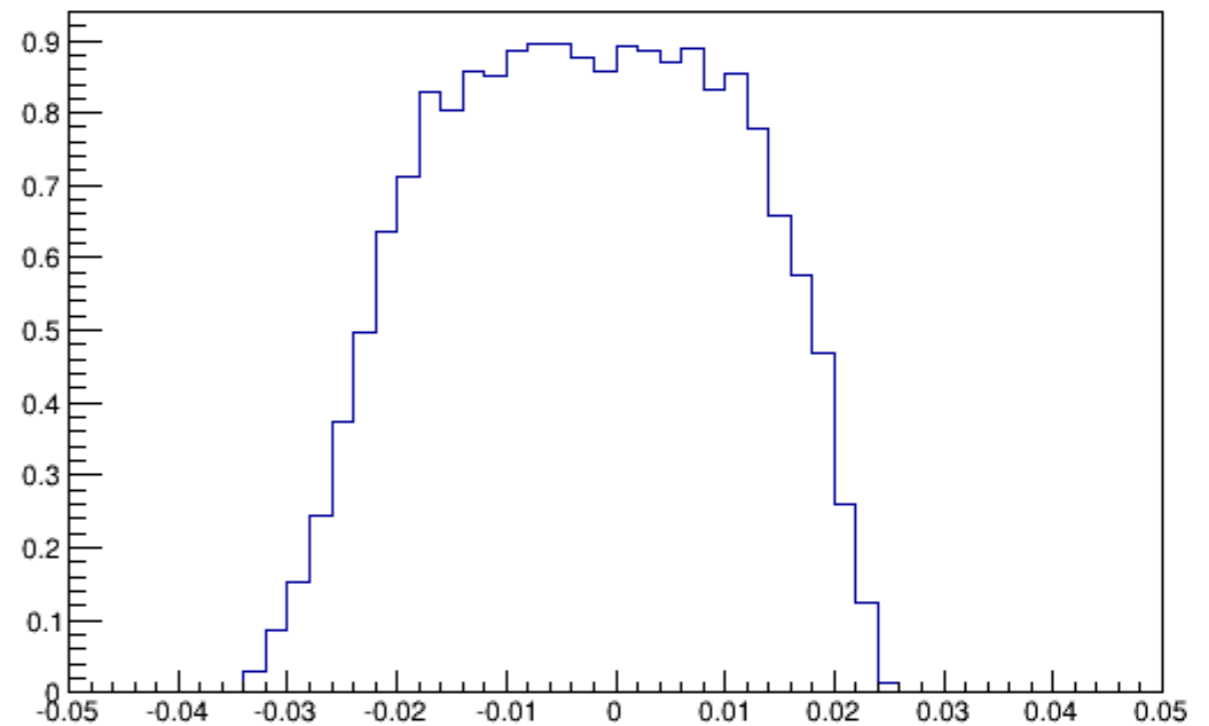
Delta (rad)



Theta (rad)

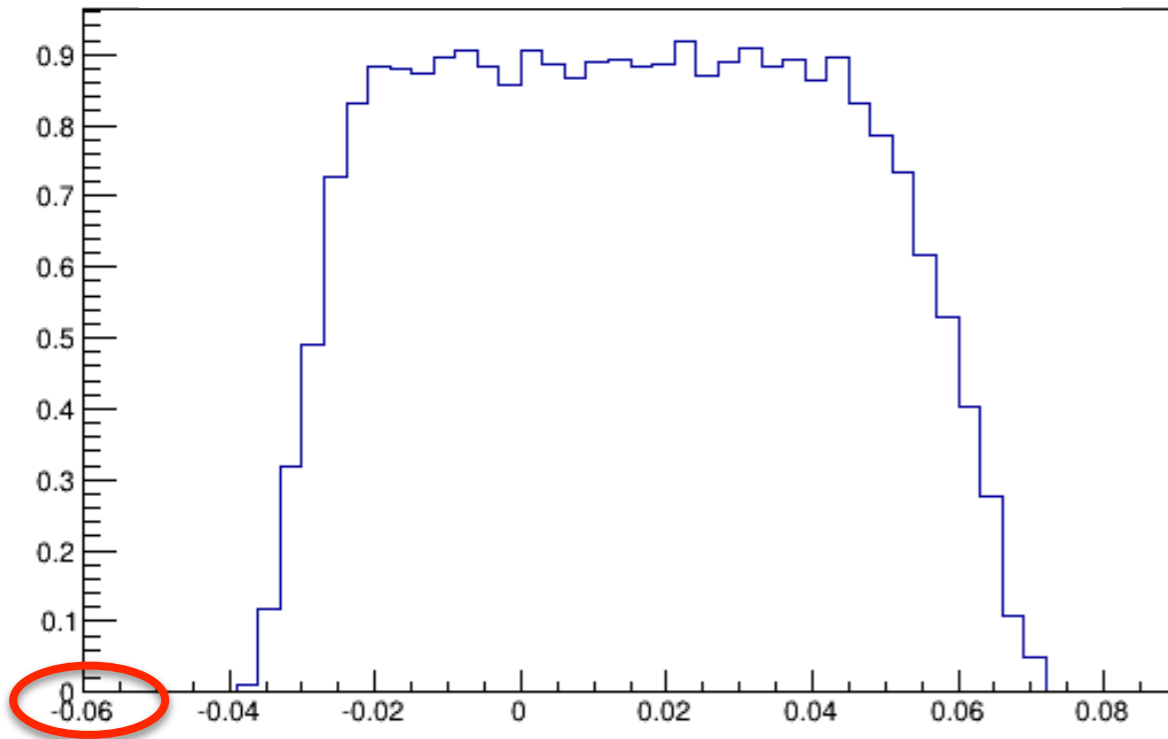


Phi (rad)

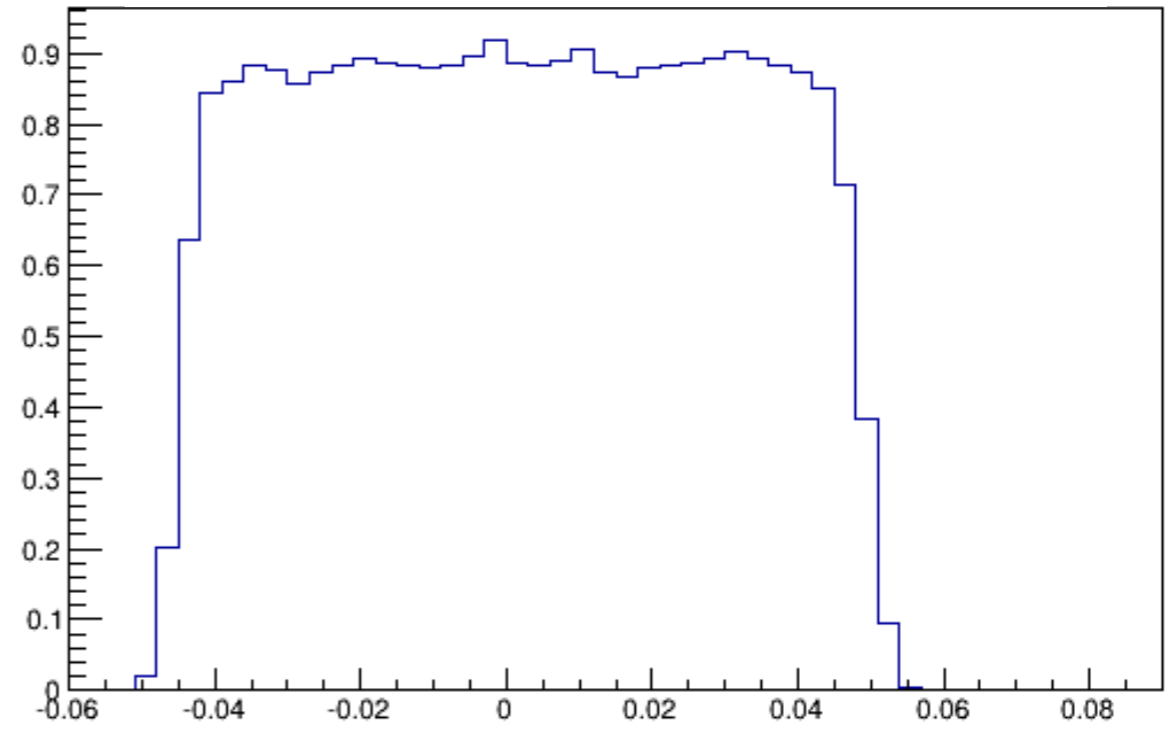


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Theta (rad), longitudinal



Theta (rad), no field



Theta (rad), transverse 2.5T

