

Electron Reconstruction

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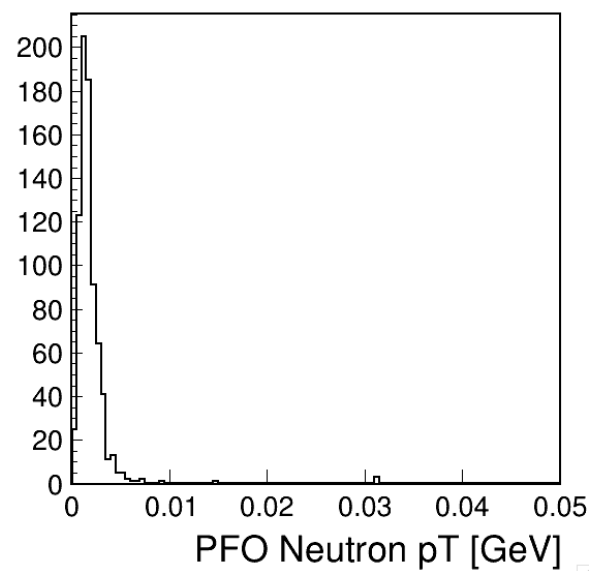
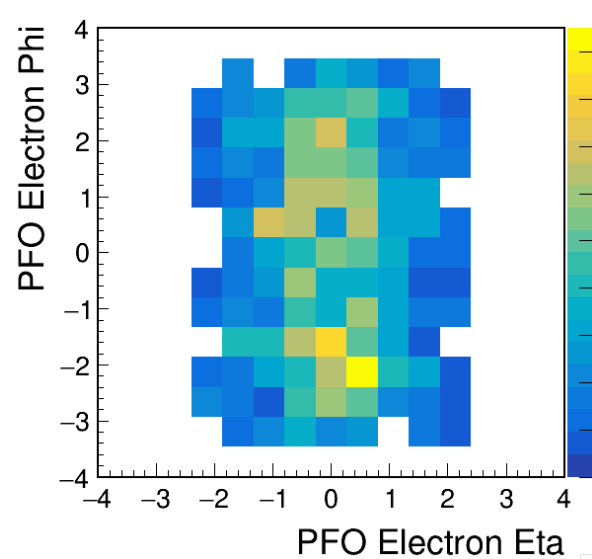
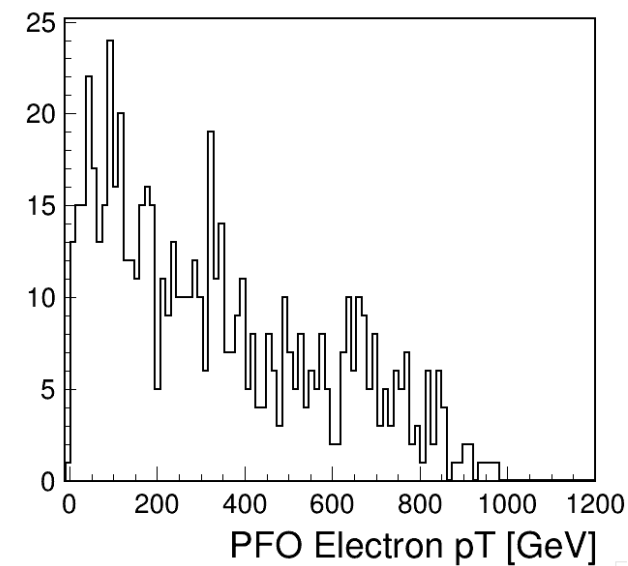
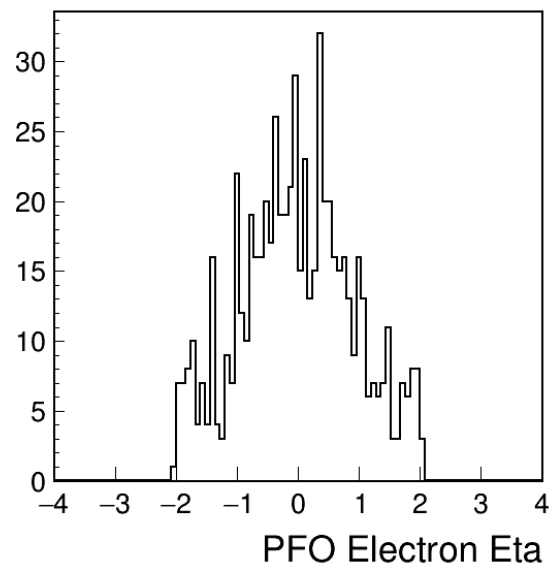
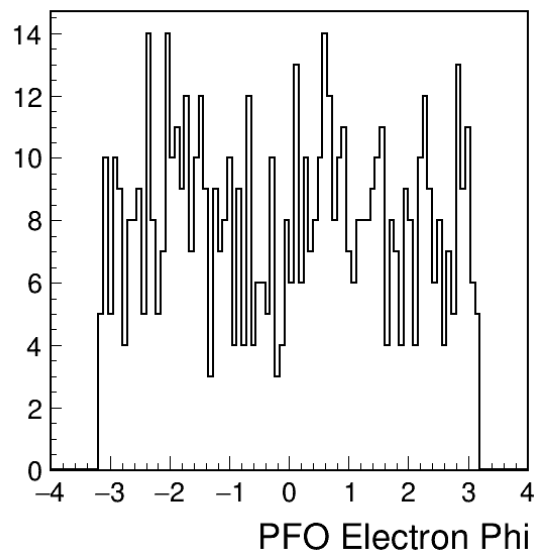
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Electron Reconstruction

- Currently using the 3 TeV detector geometry reconstruction .slcio files.
 - No 10 TeV electron gun data available.
 - /data/muonc/fmeloni/DataMuC_MuColl_v1/electronGun/reco/
 - 1000 total events
 - 4,018,543 MCP objects
 - 1000 MCP electrons before theta filter
 - 806 MCP electrons after theta filter
 - 3,054 PFO objects
 - 644 PFO electrons

(I will also have a git repository for this sometime in the near future).



- There was a high influx of neutrons in the samples.
 - These could be mis-reconstructed objects.
 - Most likely an artifact of the electrons interacting with the detector.

Next Steps:

- Currently making a simple event display script.
 - Trying to relate individual events and possibly find a relationship between the PFO neutrons and PFO electrons.
- Looking to reproduce similar plots with,
 - BIB
 - 10 TeV detector geometry.