

100 TeV Delphes study for electron efficiency

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100 TeV future collider simulation meeting



Sample

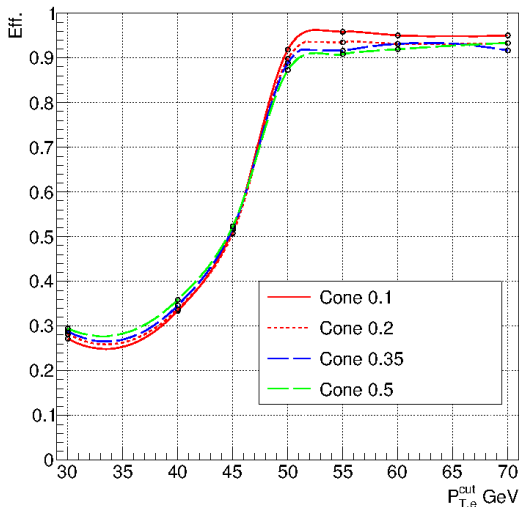
Madgraph5->PYTHIA6->Delphes3 with PU140 and Snowmass
Card

100TeV process p p > z > l+ l-

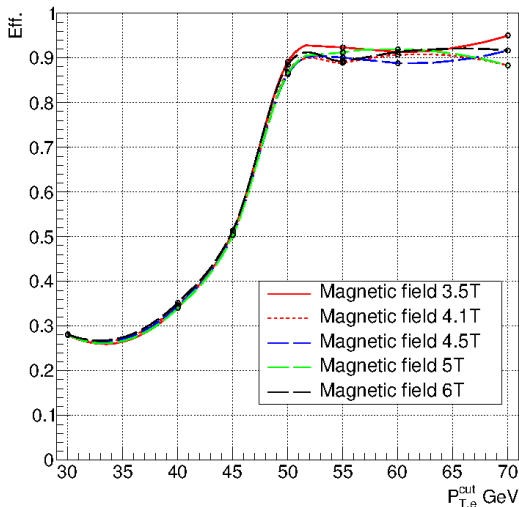
definition

$$eff. = \frac{num(GenPT > x + RECOPT > 50)}{numGenPT > x}$$

Electron Efficiency study for DELPHES electron isolation



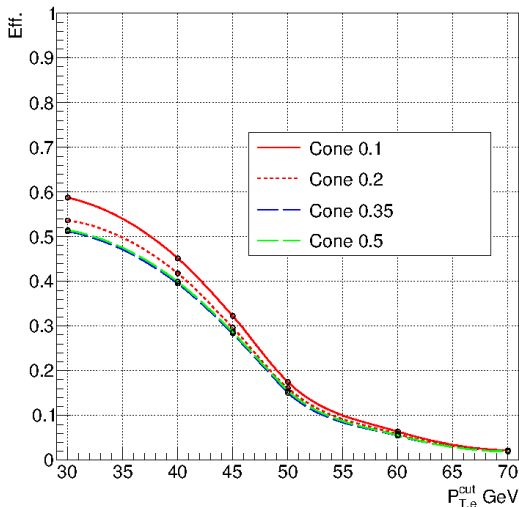
Electron Efficiency study for DELPHES diff. magnetic field



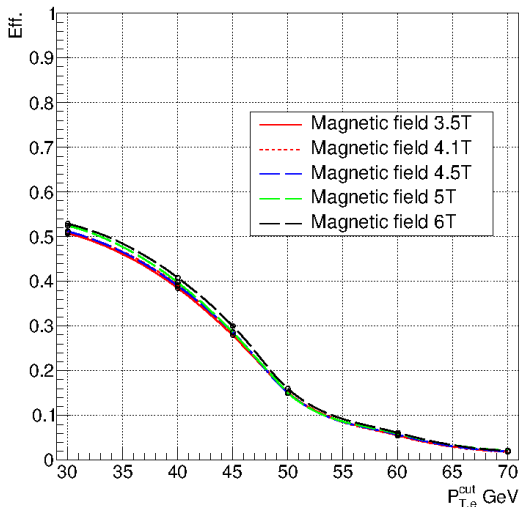
definition

$$eff. = \frac{numRECOPT > X}{GenElectronNUM}$$

Electron Efficiency study for DELPHES electron isolation



Electron Efficiency study for DELPHES diff. magnetic field



Summary

The magnetic field seems has little influence on electron efficiency.
Smaller the cone better the efficiency.