

# Development of DC and silicon fitting in CEPCSW

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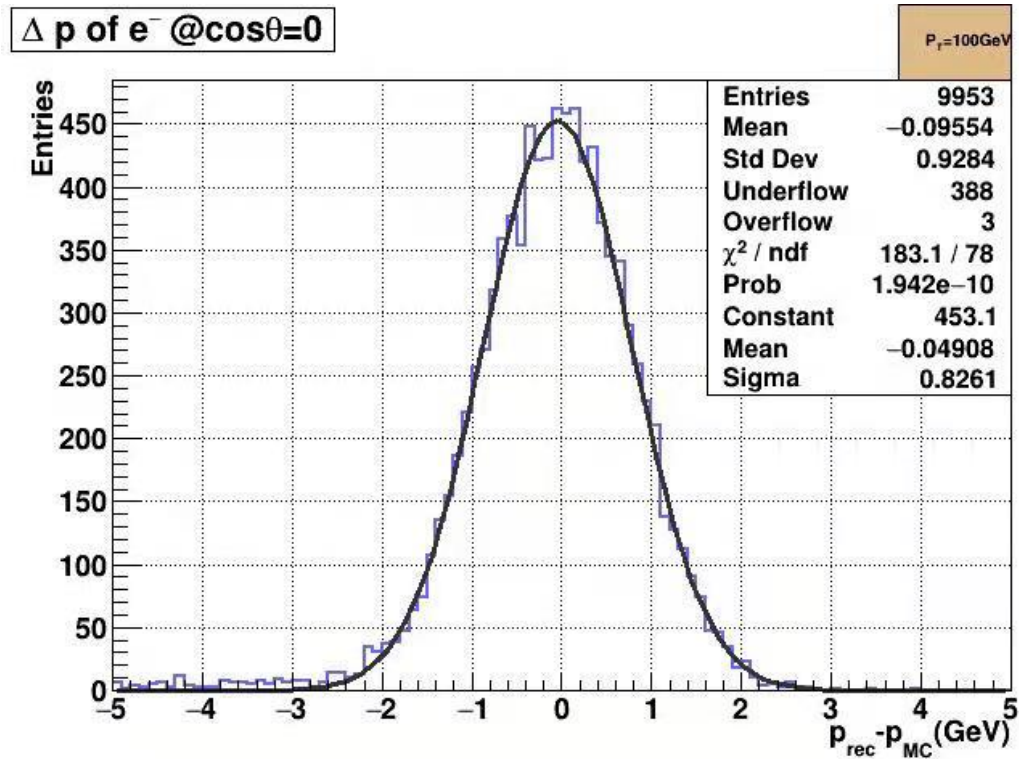
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# Status of development of DC track fitting

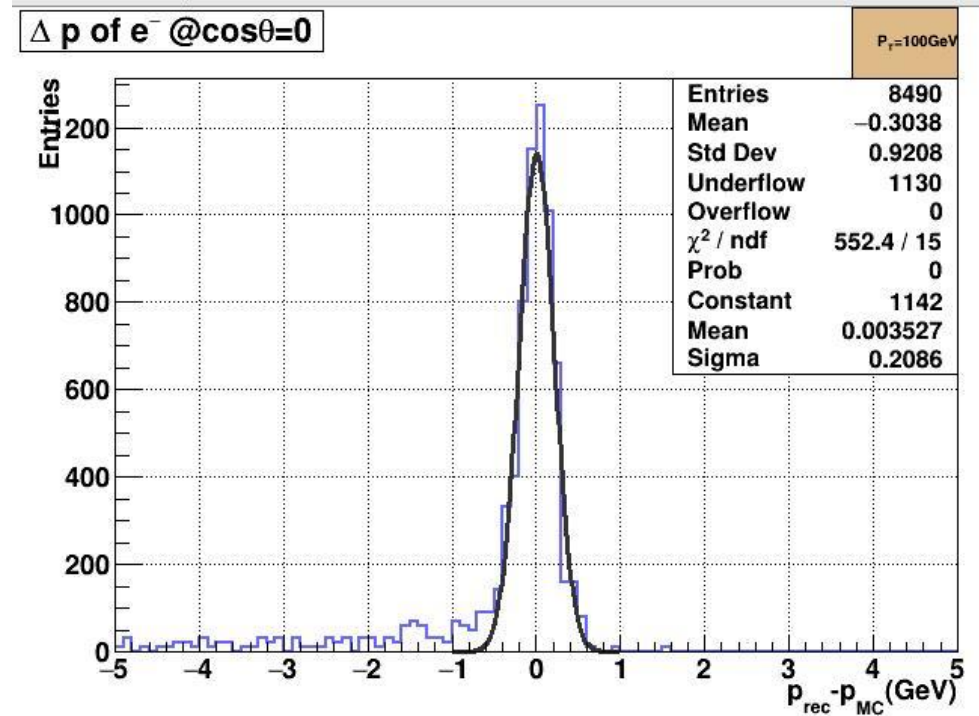
- Genfit is introduced as one of the CEPC external libraries
- Track fitting with Genfit for DC only have been released
- Development of DC+Silicon status
  - Si track -> SDT track in TruthTracker
  - Track fitting of space point of Si hits + space point of DC hits
- Problems:
  - Crash in the reading of simulation data with empty first entry in collection
  - Multi-turn track in 1GeV silicon w.o. ECAL
  - Input of the silicon track has large discrepancy with MC truth
- Next:
  - Put the error of silicon hits and track
  - Use DC wires and DOCA as input

# Momentum Resolution

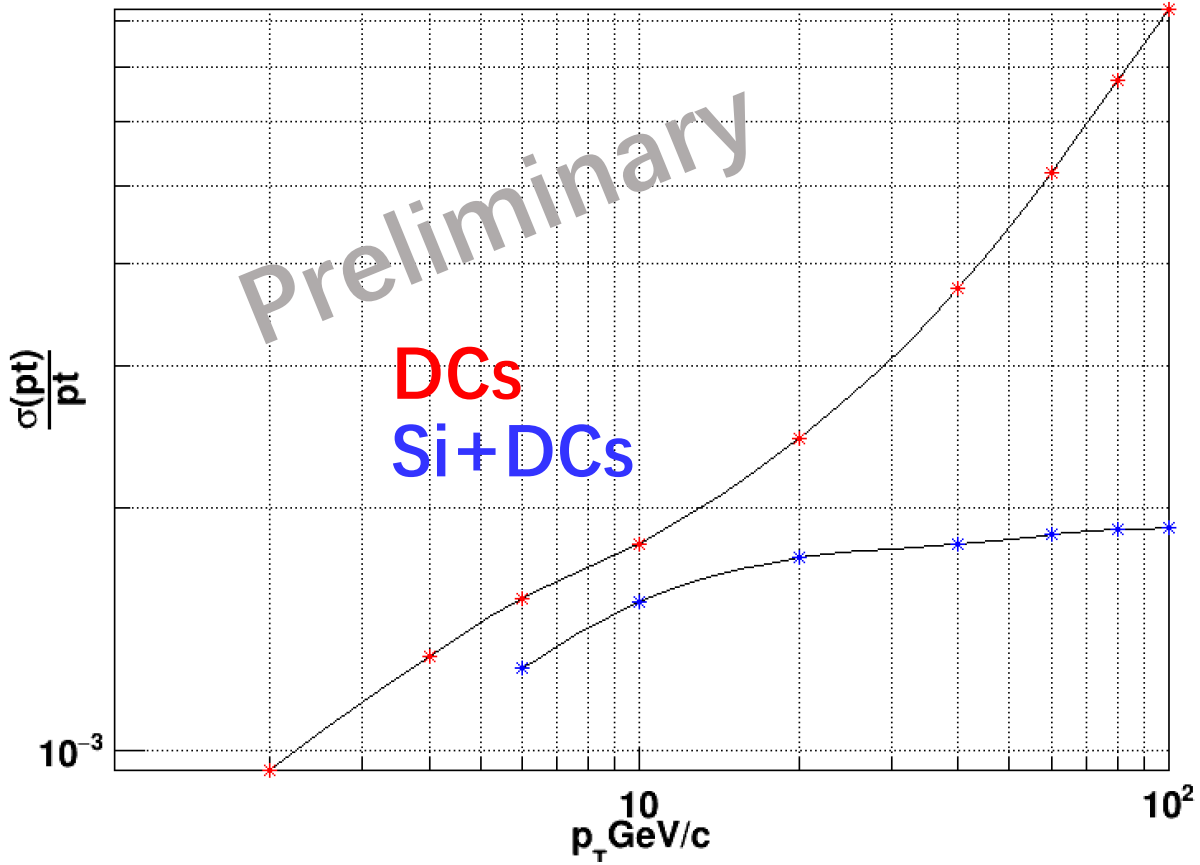
DC



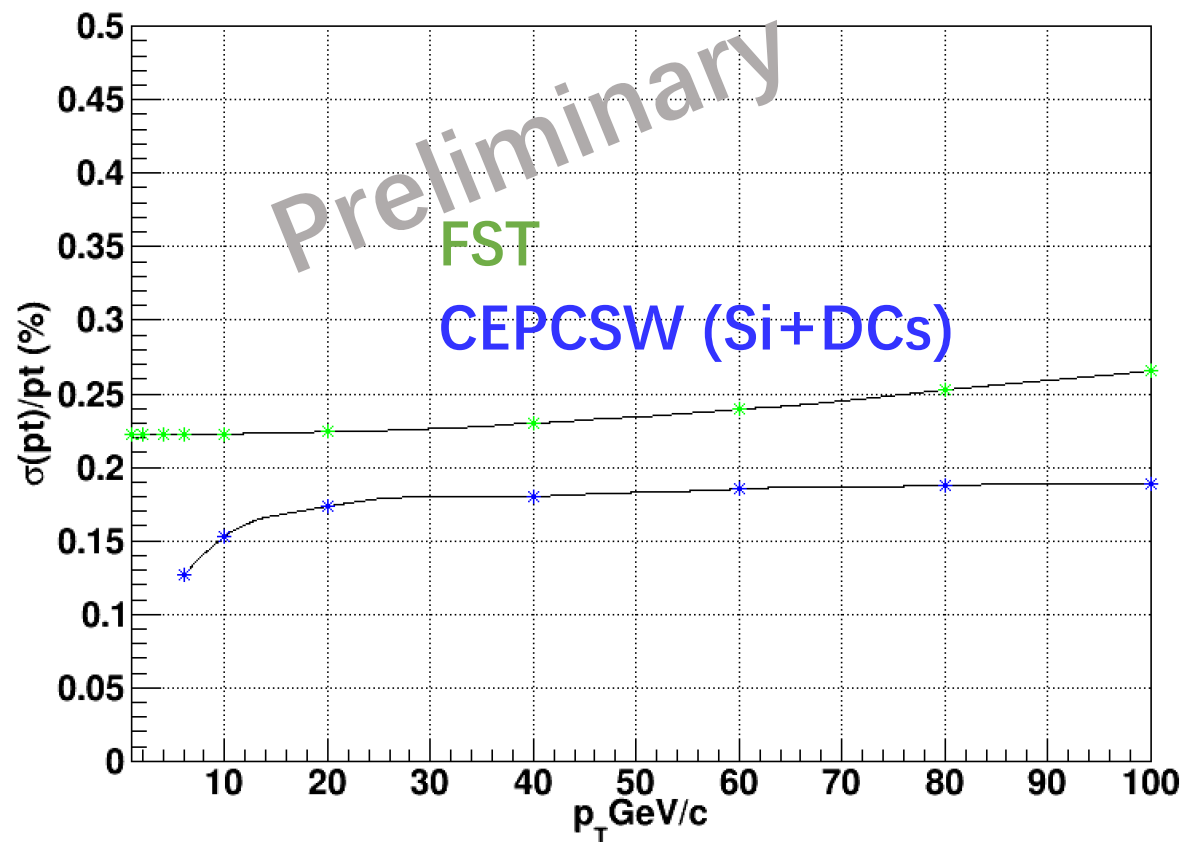
Si+DC



# Momentum resolution vs $p_T$



# Momentum resolution vs $p_T$ of CRD in CEPCSW



# Summary

- Track fitting with Genfit for DC only have been released
- The first version of track fitting with Genfit have been developed