

# Status on SDT simulation work

# Status

- From information by Chengdong, a bit more carefully follow the actual codes

## -- Track identifying part

CEPCSW/Reconstruction/SiliconTracking/src/ForwardTrackingAlg.cpp / \*\*\*.h

CEPCSW/Reconstruction/SiliconTracking/src/SpacePointBuilderAlg.cpp / \*\*\*.h

CEPCSW/Reconstruction/SiliconTracking/src/TrackSubsetAlg.cpp / \*\*\*.h

CEPCSW/Reconstruction/Tracking/src/FullLDCTracking/FullLDCTrackingAlg.cpp / \*\*\*.h

## -- KalTest ...

CEPCSW/Utilities/KalDet/src/ild/tpc/ILDTPCKalDetector.cc

refer also

<https://www-jlc.kek.jp/subg/offl/kaltest/>

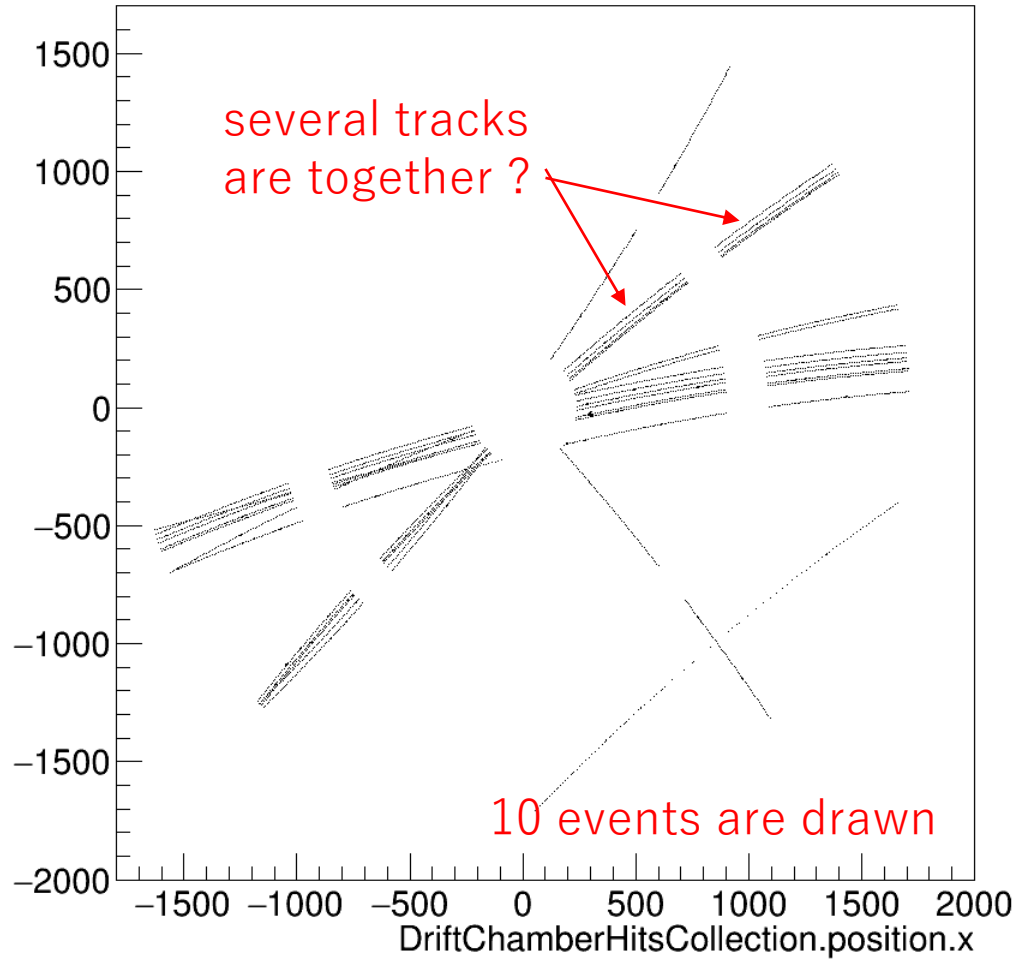
# Comment

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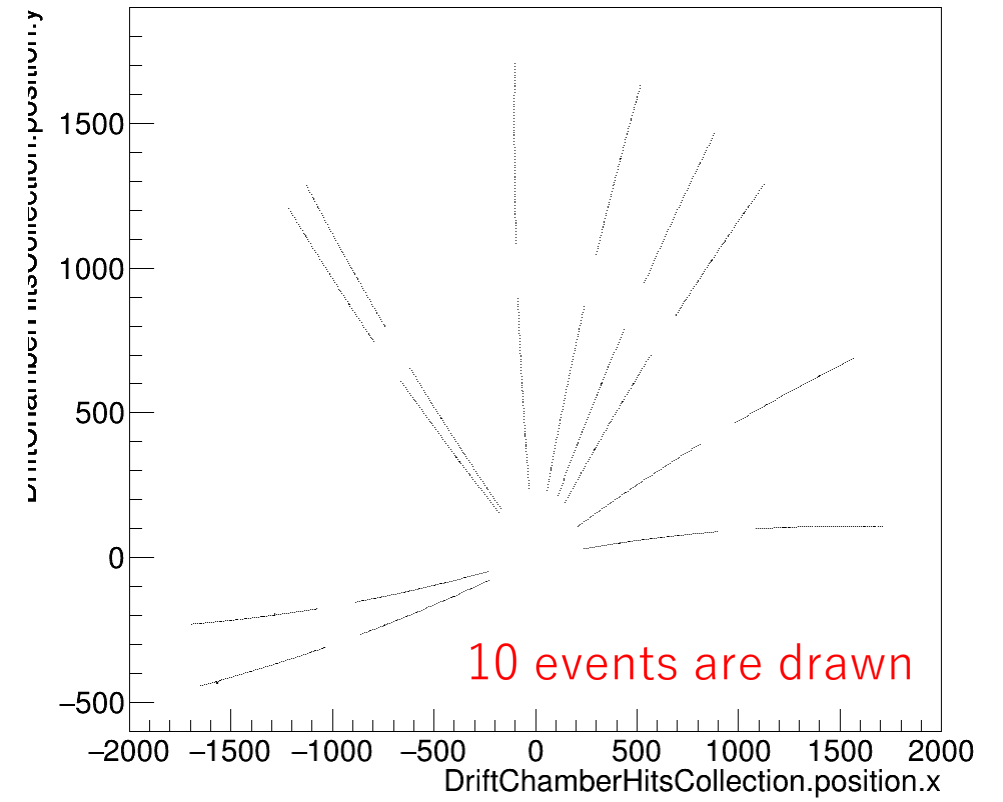
- be effective to continue own scheme
- Possible differences
  - detector resolution setting ( i.e.  $\sim 4 \mu\text{m}$  for pixel detector )
  - hit Gaussian smearing.
  - multiple track identification → change to muon injection could help a bit ?
  - track finding for each detector component and merge at the final
  - Kalman filter ( not follow the details yet)
- Try to run the SDT(=only drift chamber) script with the latest version
  - ( -- Aiming to switch injection particle , pion→muon )
  - hit pattern is ?

# Hit pattern ?

newly obtained ( muon )



have received in past ( pion )



# Next

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- update the difference before Kalman filter as much as could
- Compare the momentum resolution