

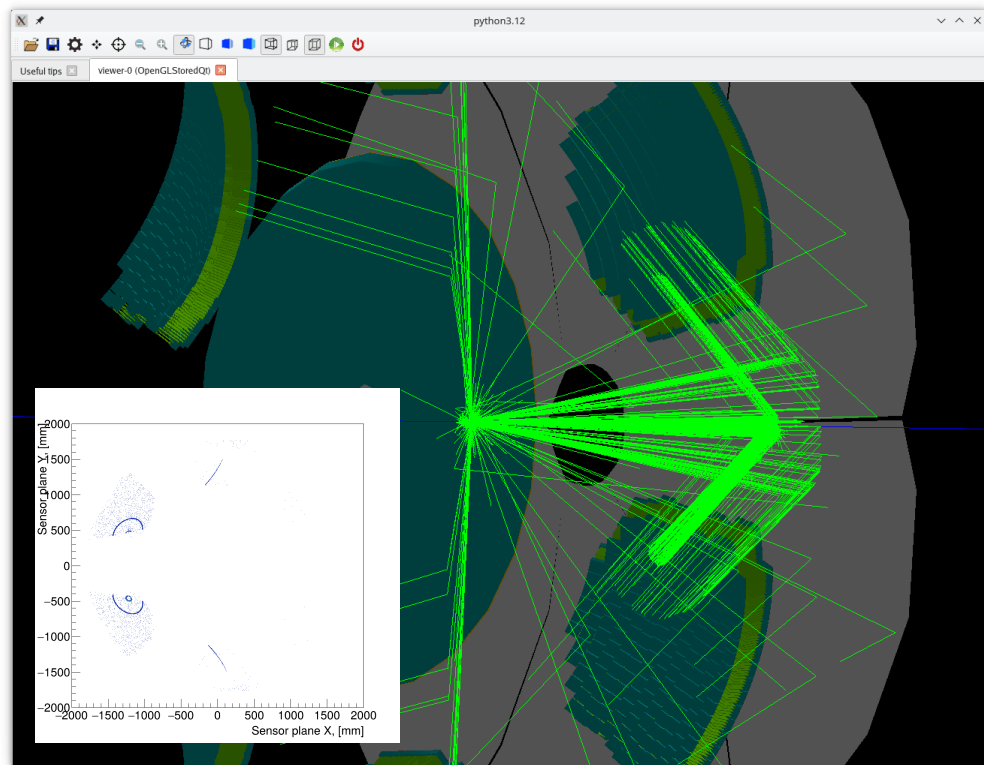
# **IRT 2.1 for dRICH in ePIC software stack**

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**ePIC pfRICH Software Meeting, 10/02/2025**

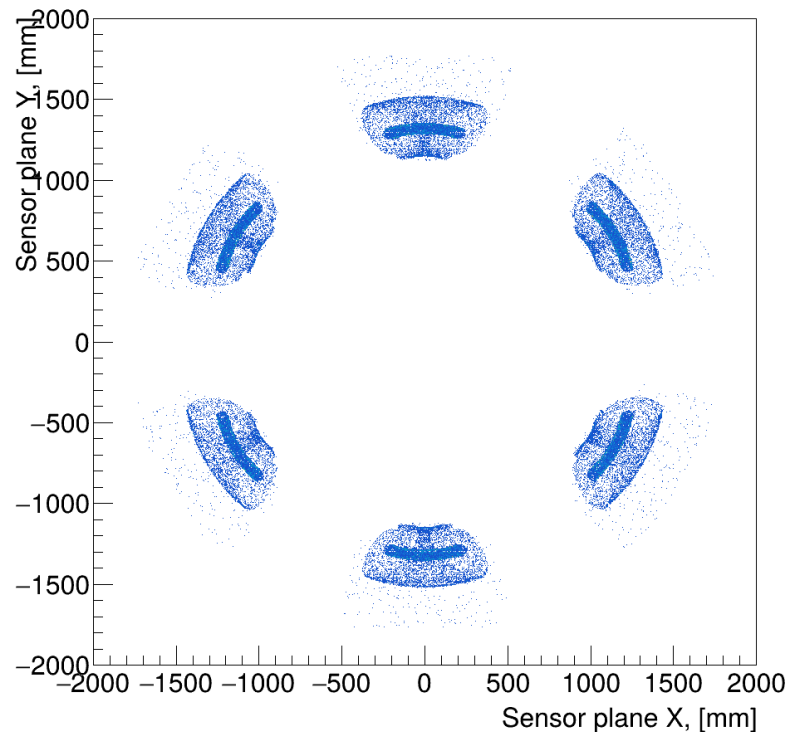
# dRICH implementation details

- Chris's dRICH\_geo.cpp used as a starting point
- IRT optics ROOT file creation lines incorporated in all places
  - Gas volume, acrylic filter, aerogel
  - Spherical mirror sectors
  - PDU assemblies with SiPMs
- ! This stuff made optional in CMakeLists.txt
- Reconstruction: RICH-IRT.cc plugin
  - With a dRICH-specific JSON config file

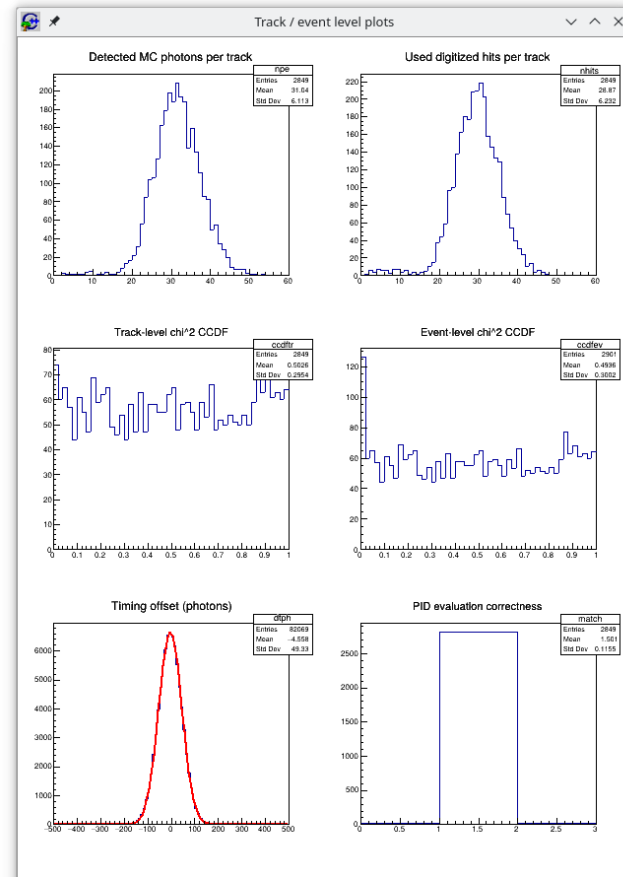


30 GeV/c pions:  $\eta=2.0$ ,  $\phi=0.0$

# dRICH IRT 2.1 reconstruction

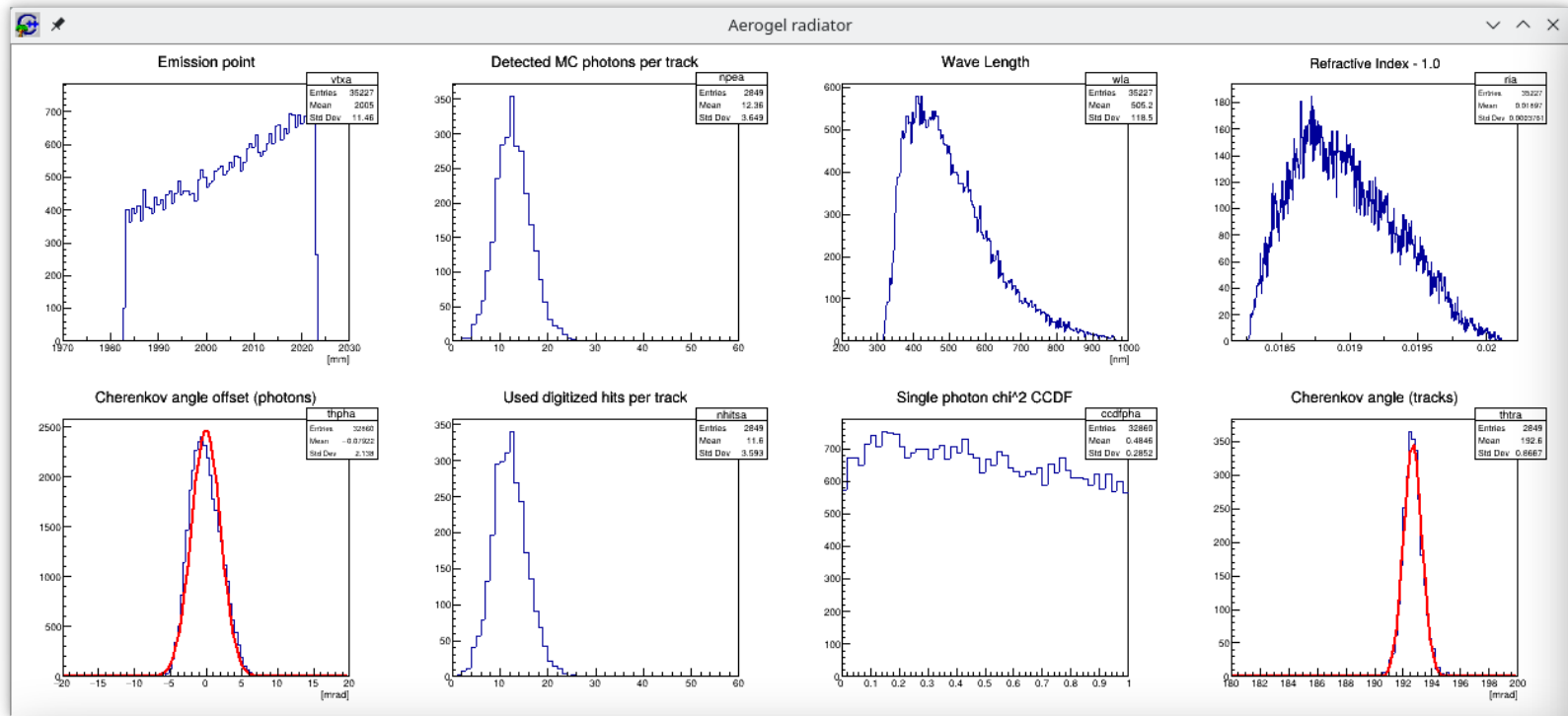


Digitized hit map (10 GeV/c pions,  $\eta=2.0$ )



Combined IRT pass plots

# Aerogel radiator evaluation plots



# Gas radiator evaluation plots

