

# FTS Software Overview

Ralf Kliemt

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# Simulation

- Geometries:

- fts.geo

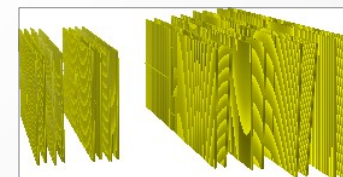
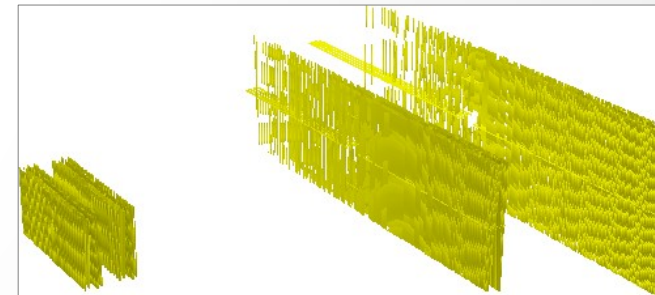
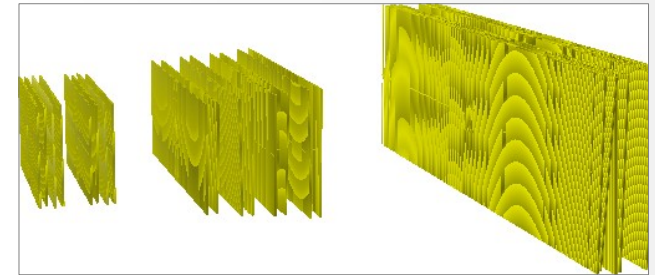
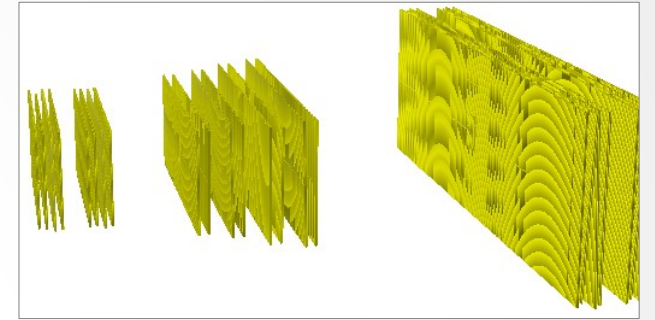
- fts\_v2.geo

- fts\_1256.geo

- fts\_reduced.geo

- 2 Versions of Fts detector

- PndFts2 for fts\_v2.geo?



# Digitization/Reconstruction

- Copied from STT code
  - code bases should be merged in the future
- Hardcoding: Geometry changes will result in logic bugs!
- **PndFtsHitProducerIdeal**
- **PndFtsHitProducerRealFast** (default?)
- **PndFtsHitProducerRealFull**
  - Takes much computing time

# Tracking

- PndFtsTrackerIdeal:
  - **SetMomentumSmearing**(dpx, dpy, dpz) or **SetRelativeMomentumSmearing**(dp/p)
  - **SetVertexSmearing**(dx, dy, dz)
  - **SetTrackingEfficiency**(epsilon)
  - **SetMinFtsHitsPerTrack**(n)
  - **New**: **DeactivateFtsStation**(i)
  - **SetGemActivity**(true) & **SetMvdActivity**(true)
  - Use it now for the design studies!
- Realistic PR is under construction

# Summary

- Simulations are possible
- Different Setups provided by geometry
- Setups can be mimicked by **PndFtsIdealTracker** (less simulation load).