

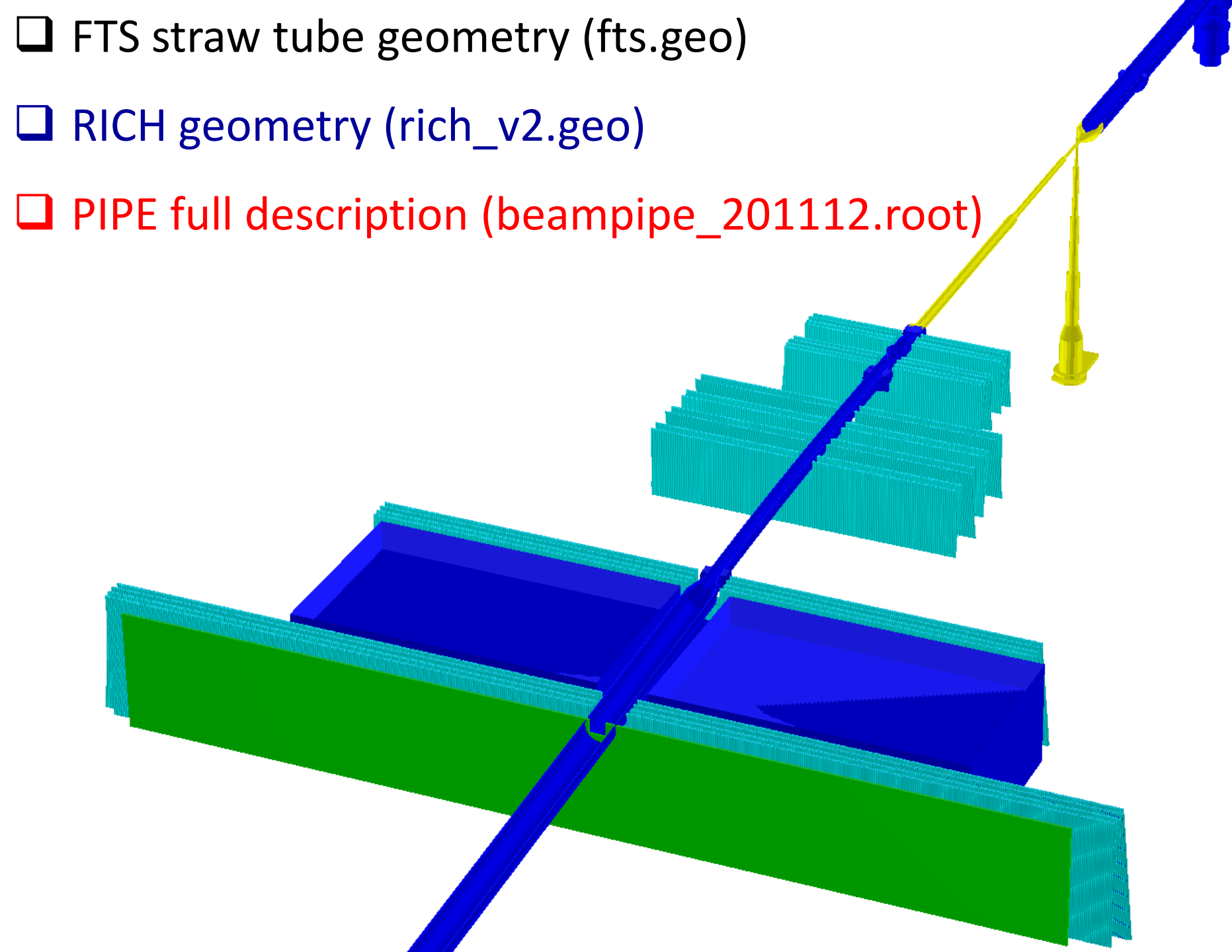
Organization of Forward Tracking software activities

Stefano Spataro

The Geometry Files

- ❑ FTS straw tube geometry (fts.geo)
- ❑ FTS compact straw tube geometry (fts_v2.geo)
- ❑ FTS dummy geometry (fts_dummy.geo)
- ❑ RICH geometry (rich_v2.geo)
- ❑ RICH geometry for compact FTS (rich_v2_shift.geo)
- ❑ PIPE full description (beampipe_201112.root)

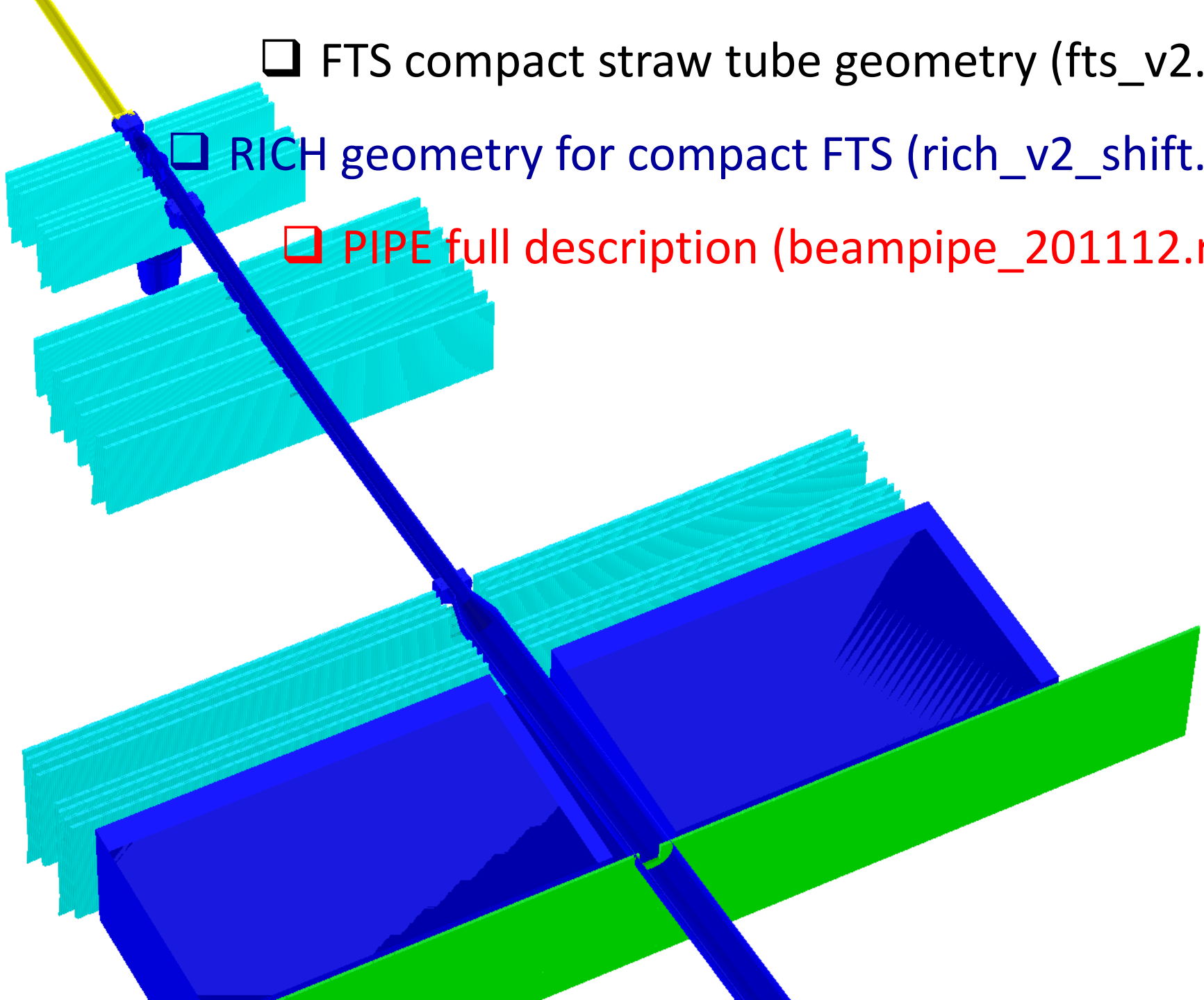
Overlaps and position of holes fixed



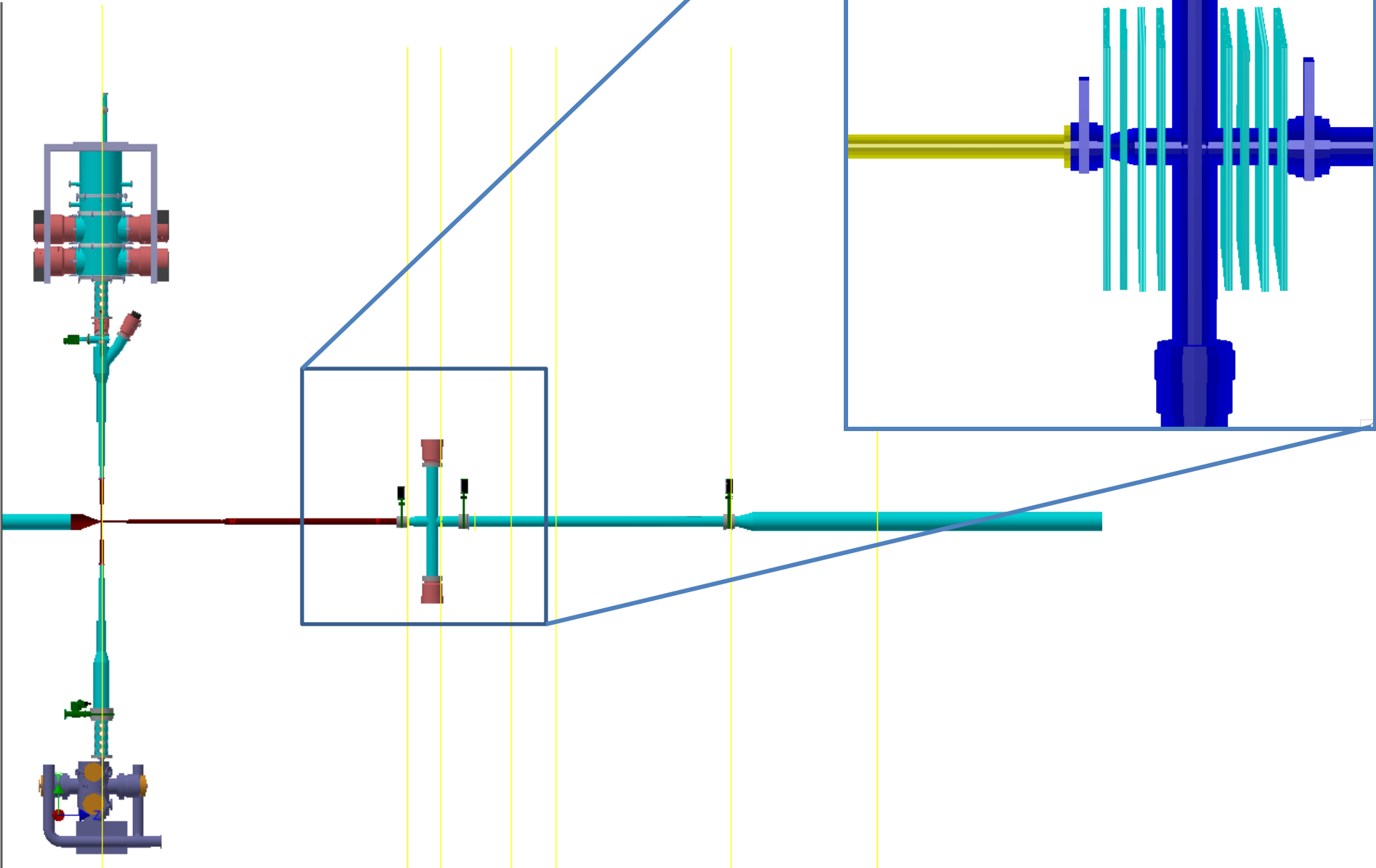
□ FTS compact straw tube geometry (fts_v2.geo)

□ RICH geometry for compact FTS (rich_v2_shift.geo)

□ PIPE full description (beampipe_201112.root)

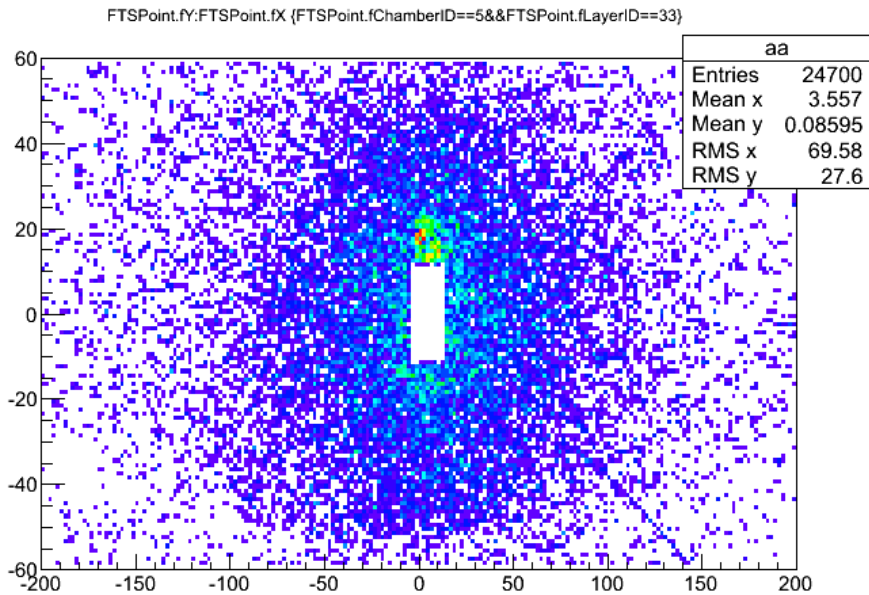


CAD Drawing

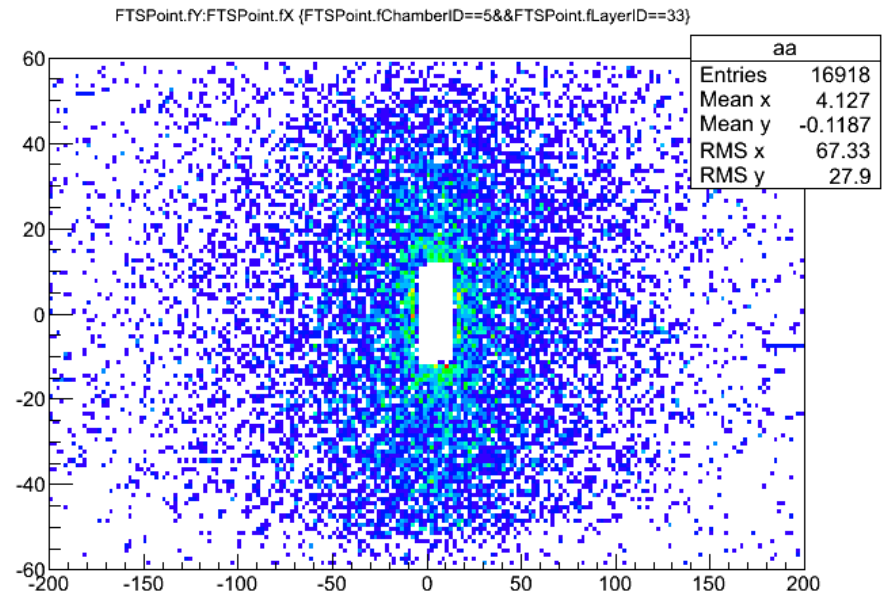


Effect of the Pipe

PIPE



NO PIPE



FTS5 1st layer

Tracking

- Ideal FTS pattern recognition
- Ideal MVD+GEM+FTS pattern recognition
- Kalman Filter (realistic fit)
- Propagation of Montecarlo information
- Analysis Chain

Ready for Analysis

Working Packages Proposal -1

Crakow (J. Biernat)

- ❑ Run DPM simulations (different momenta)
- ❑ Run UrQMD simulations (different target, momenta)
- ❑ Check rates/cm²/sec (aging)
- ❑ Check detector acceptance (angular, momentum)
- I asked Aida to simulate 100k UrQMD events, pN, pAr, pAu @ 15 GeV/c
- DPM simulations can be run by everybody

Working Packages Proposal -2

Ferrara (E. Fioravanti, I. Garzia)

- Single particle studies
- Check momentum resolution for FTS and MVD+GEM+FTS fieldwise
- Check resolution for different skew angles

Working Packages Proposal - 3

Jülich (M. Jadhav)

- ❑ Comparison with full or compact design
- ❑ Resolution, acceptance, ...

Working Packages Proposal - 4

Giessen (M. Galuska)

- ❑ Pattern Recognition
- ❑ Single chamber PR, double chamber PR, momentum reconstruction (prefit)

Jülich

Study of compact design

Crakow

Occupancy

Ferrara

Momentum reconstruction

Giessen

Pattern recognition