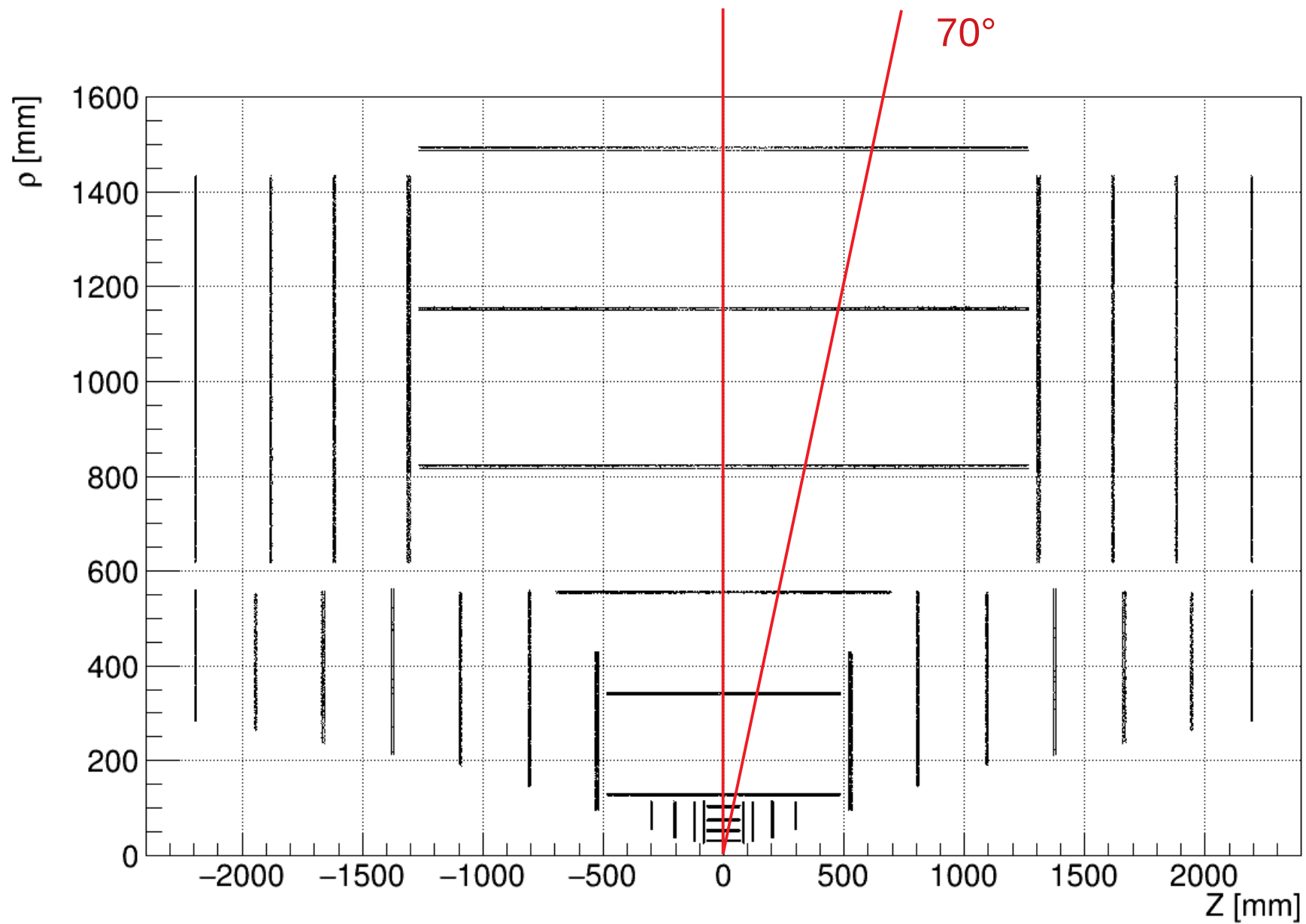


Report on tracking

Massimo

June 30, 2020

Track finding range



Conformal tracking configuration

[VXDBarrel]

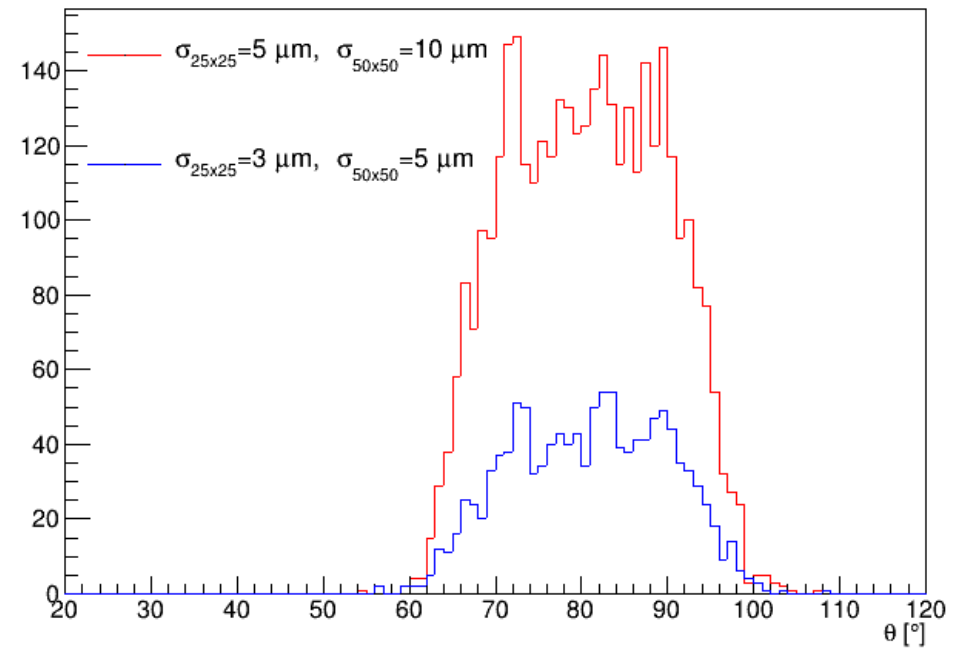
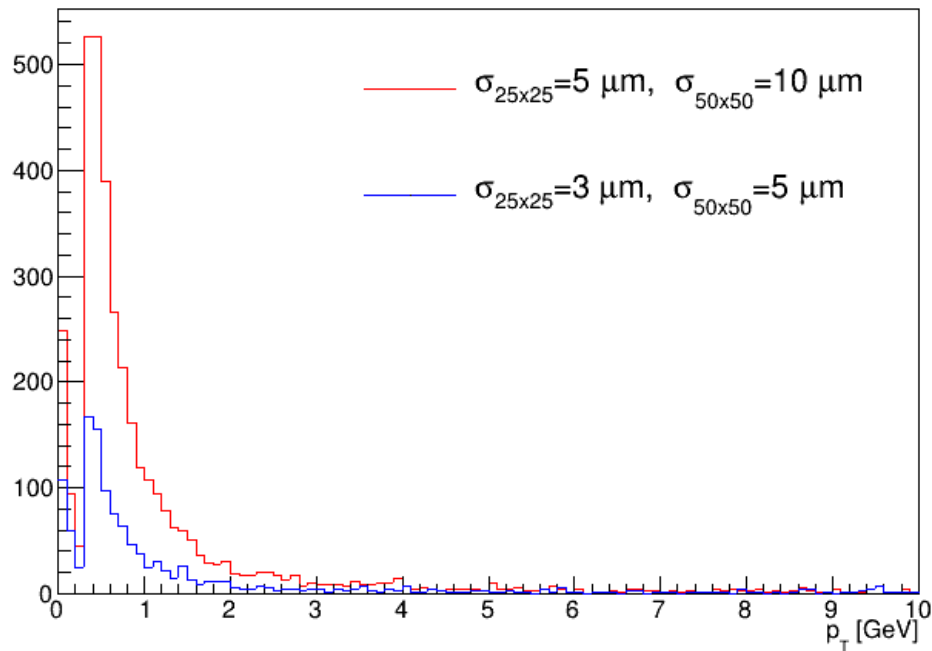
```
@Collections : VXDTrackerHits
@Parameters : MaxCellAngle : 0.007; MaxCellAngleRZ : 0.007; Chi2Cut : 100;
               MinClustersOnTrack : 4; MaxDistance : 0.025; SlopeZRange: 10.0; HighPTCut: 1.0;
@Flags : HighPTFit
@Functions : CombineCollections, BuildNewTracks
```

[Tracker]

```
@Collections : ITrackerHits, OTrackerHits
@Parameters : MaxCellAngle : 0.025; MaxCellAngleRZ : 0.035; Chi2Cut : 100; MinClustersOnTrack : 4;
               MaxDistance : 0.009; SlopeZRange: 10.0; HighPTCut: 0.0;
@Flags : HighPTFit, VertexToTracker, RadialSearch
@Functions : CombineCollections, ExtendTracks
```

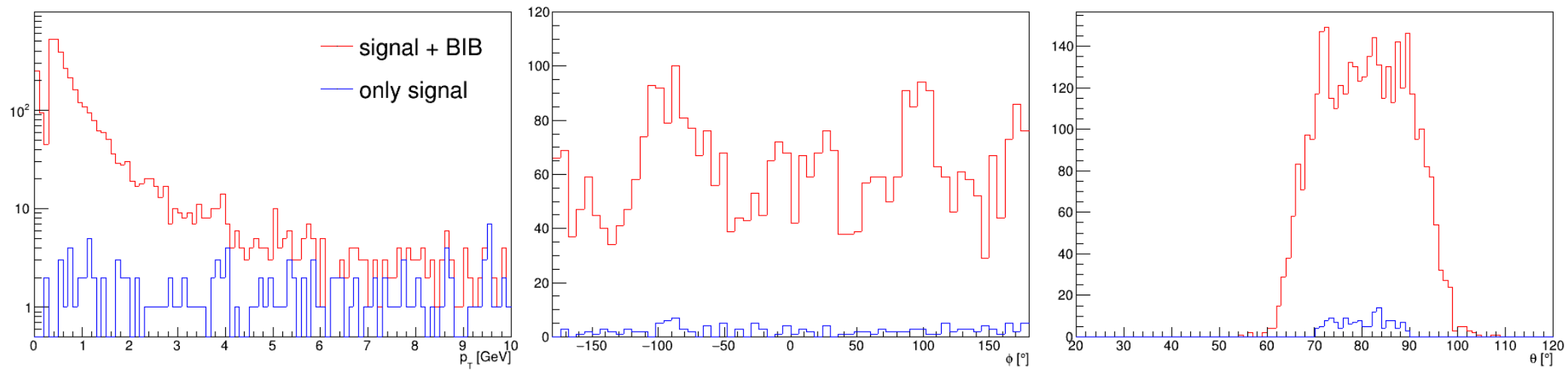
Resolution matters

- Assumed $25 \times 25 \mu\text{m}^2$ pixels in VXD and $50 \times 50 \mu\text{m}^2$ in IT and OT.



Signal + BIB tracks

- Signal = 1 event w/ 1000 muons



Signal + BIB trk efficiency

● Signal = 1 event w/ 1000 muons

