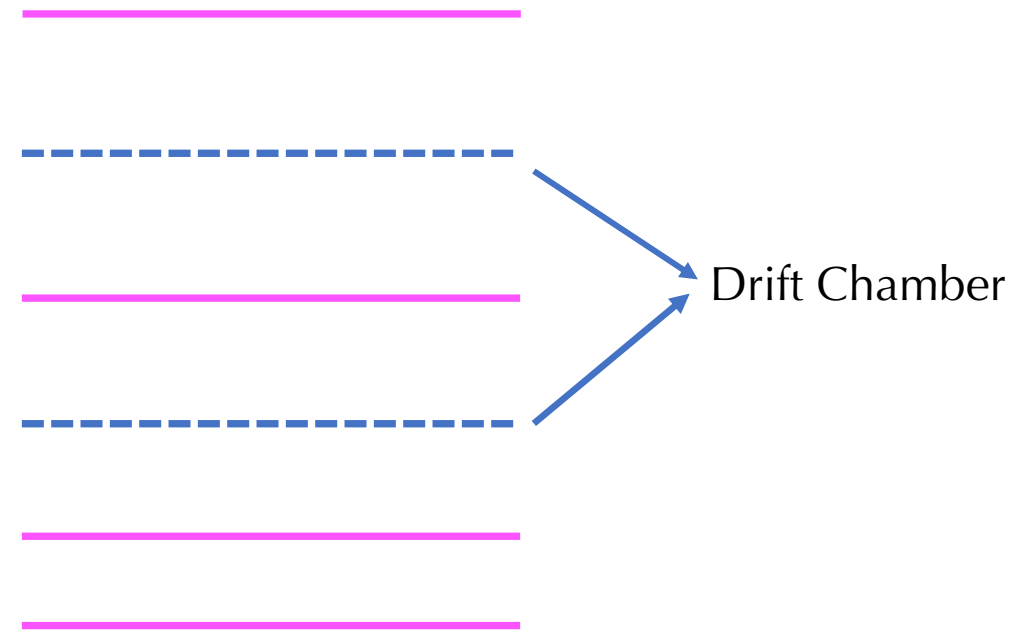
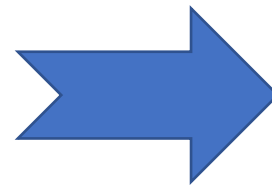
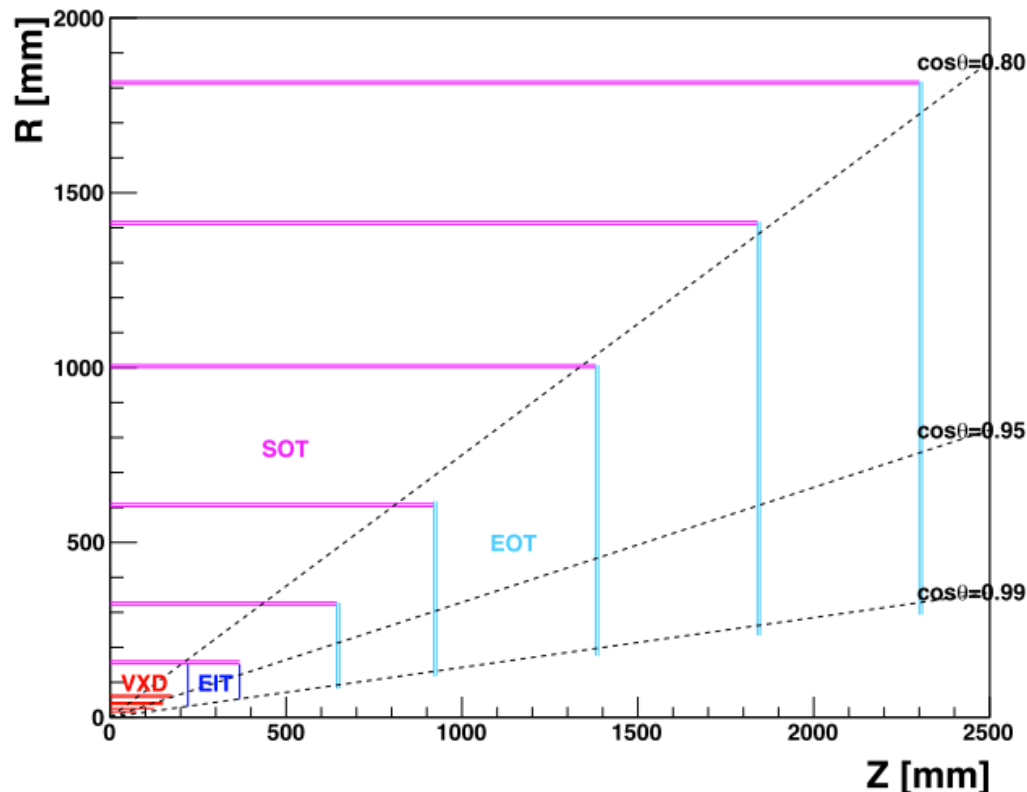


# CEPC Silicon Drift Chamber Tracker (SDT)

Xin Shi

# CEPC Silicon + Drift Chamber Tracker

- Explore the combination of Silicon and Drift Chamber Tracker (SDT)
- Based on the Full Silicon Tracker (FST)
- Replace two silicon layers with drift chamber layers



# Release Plan for SDT

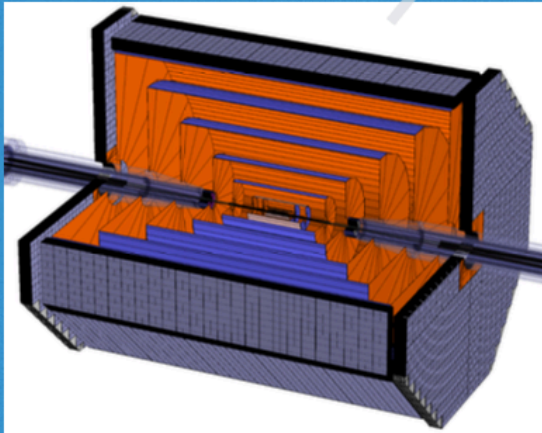
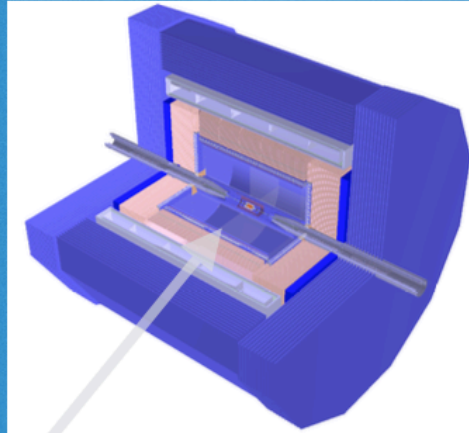
- v0.1: Define baseline concept and geometry
- v0.2: Simulation structure of 4-layer silicon tracker
- v0.3: Simulation structure of 2-layer of drfit chamber
- ...
- v1.0: SDT simulation and reconstruction complete for barrel region
- Compare tracking performance of SDTv1.0 with FST, FST2, TPC/Silicon
- Optimization points: material,  $dE/dx$ , overall volume, S/D layers,...

# Backup

# CEPC: 2.5 Detector Concepts

## Particle Flow Approach

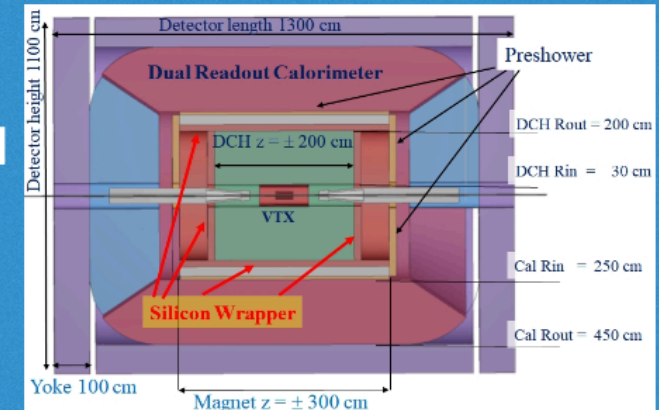
Baseline detector  
ILD-like  
(3 Tesla)



Full silicon  
tracker  
concept

**CEPC plans for  
2 interaction points**

Low  
magnetic field  
concept  
(2 Tesla)



**IDEA Concept**  
also proposed for FCC-ee

Final **two** detectors likely to be a mix and match of different options

