

# Progress in mechanical design of CEPC **detector** TDR

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June 25, 2024

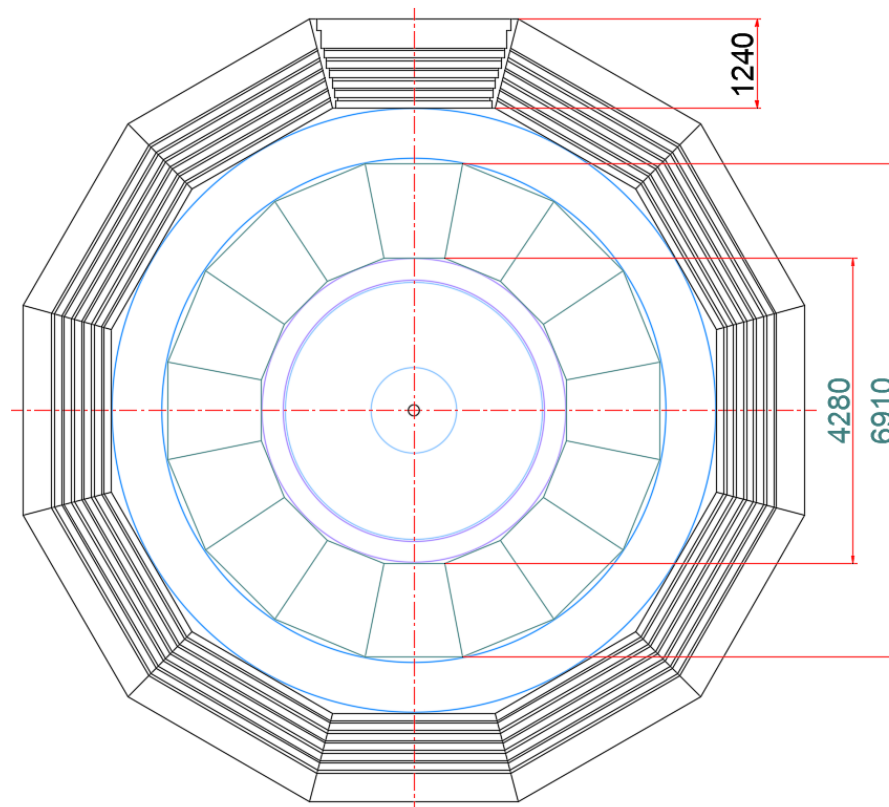
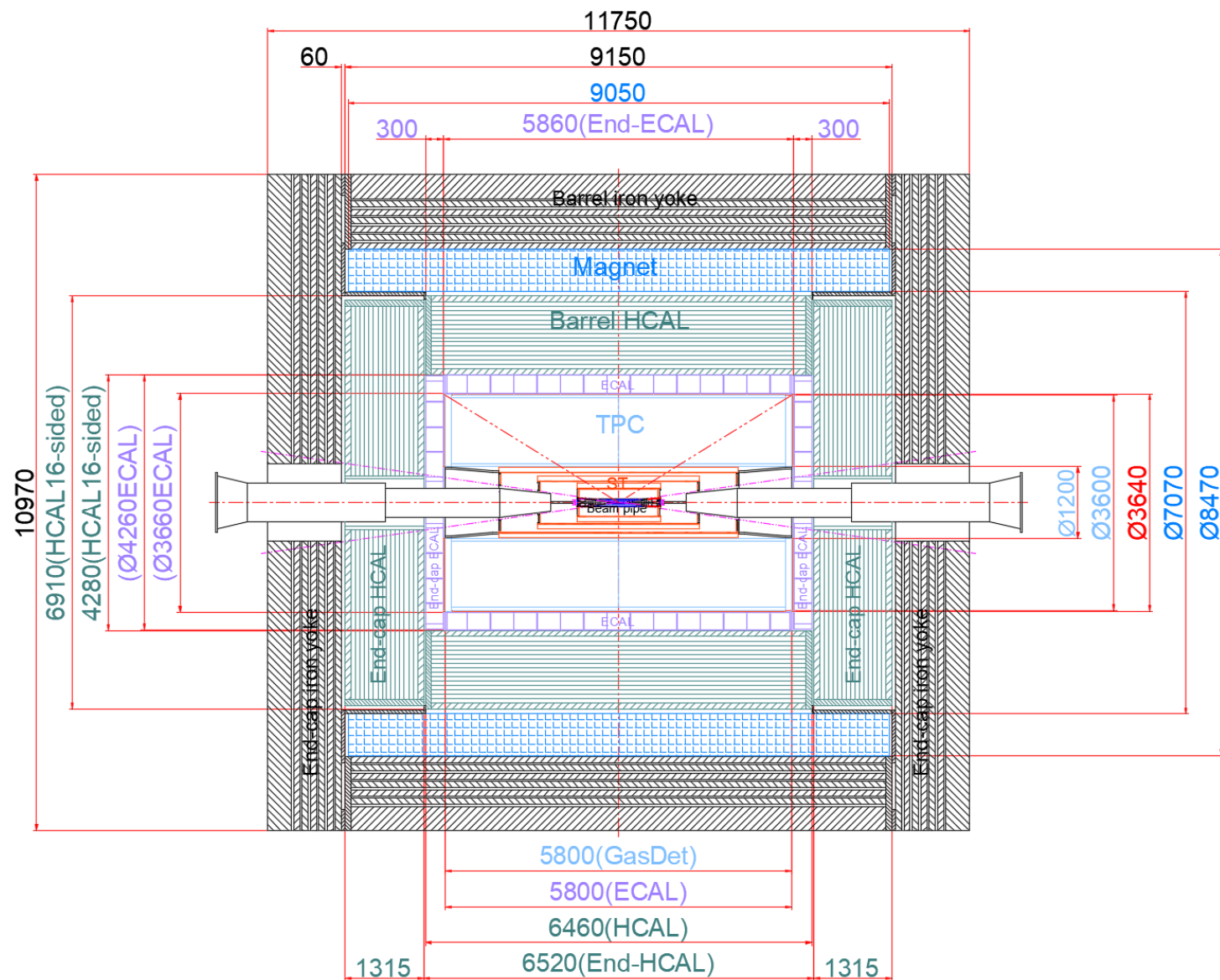
## Content:

1. Progress of general drawing and mechanical design
2. Next Plan

# 1. Progress of general drawing and mechanical design

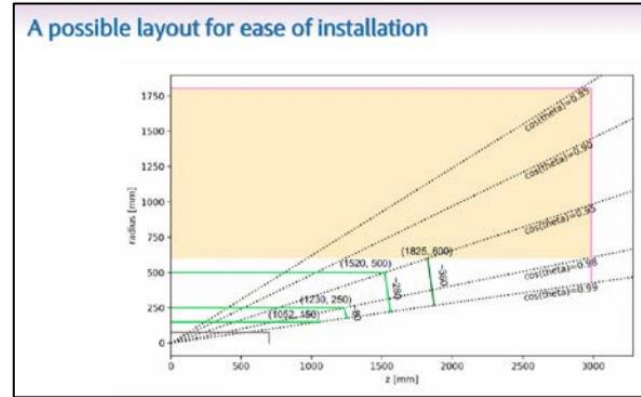
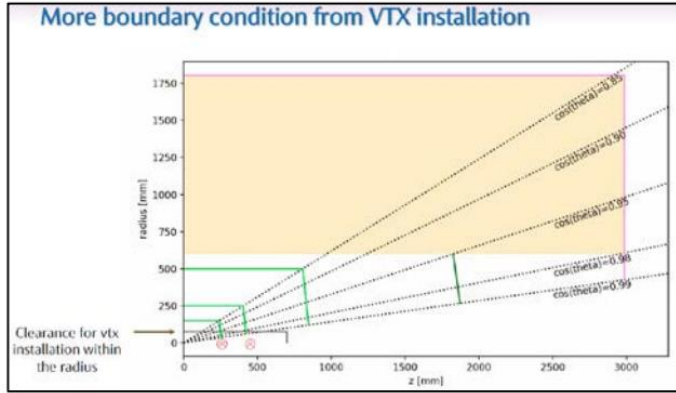
## General drawing

Update:  
**No** (June 4)

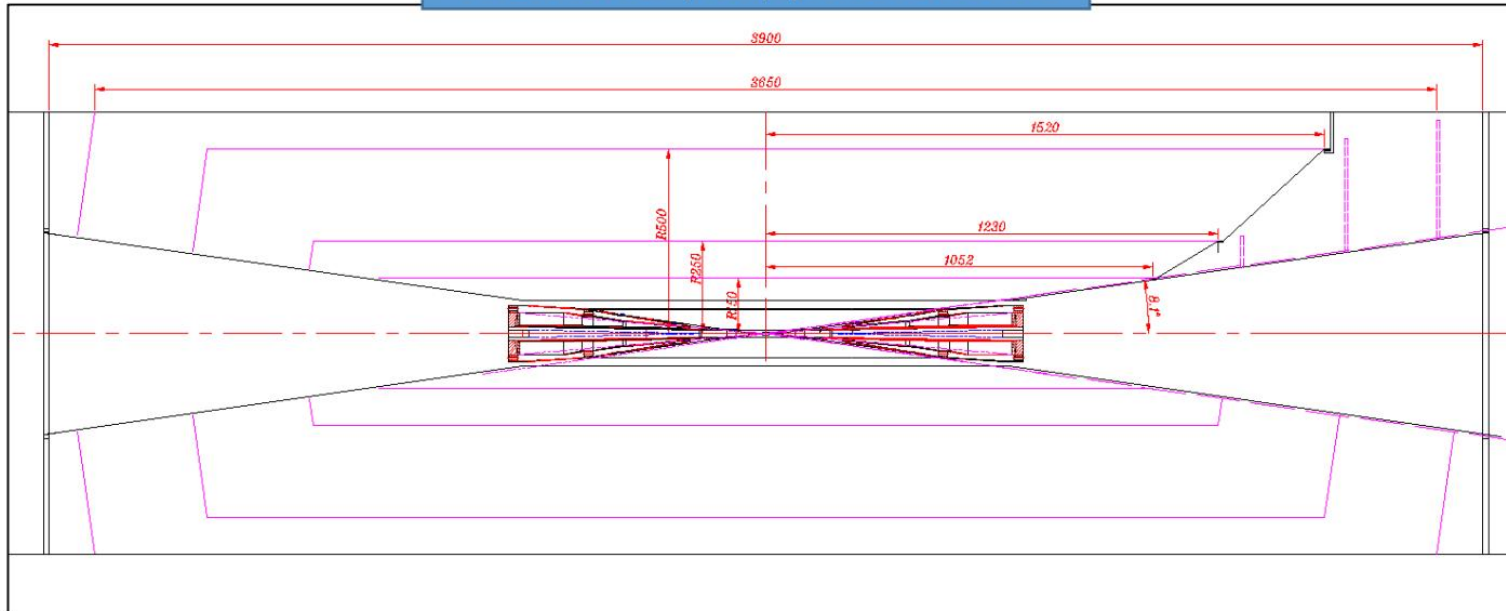


# 1. Progress of general drawing and mechanical design

## General drawing – ITK layout



### Preliminary support scheme



付金煜:

6月17日, 机械组会报告

**Suggestion:**

Considering the configuration of neighboring detectors

# 1. Progress of general drawing and mechanical design

## Mechanical design – Sub-detector

### Summary

1. Magnet --- Start designing
2. HCAL --- Start designing
3. ECAL --- Three structural options
4. TPC(OTK) --- Design independently, mutual understanding
5. ITK --- Start designing
6. Vertex --- A lot of research, a lot of questions
7. Beampipe --- A lot of research, a lot of questions

← 探测器、电子学和机械设计的磨合阶段

## 2. Next Plan

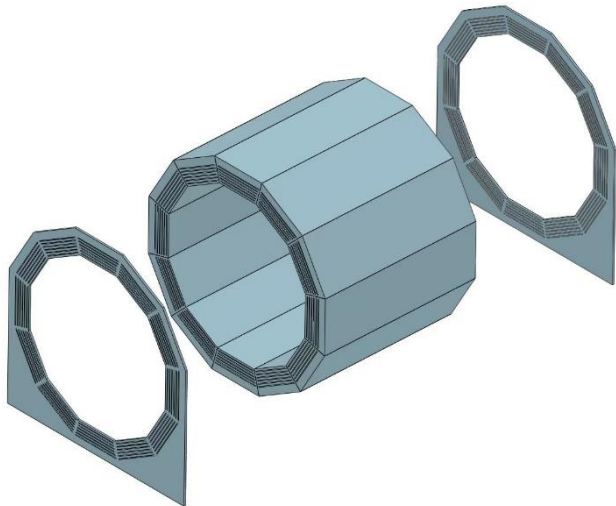
On the one hand: **Attack one by one**



**Yoke( $\mu$  detector) & Magnet**  
(Deeper and more detailed design)



**Underground experimental hall**



On the other hand: **Sub detector design keeps up with the rhythm of detectors and electronics**



**Exercise and train the mechanical design team**



1. MDI report
2. Design Exchange

Summary and precipitation