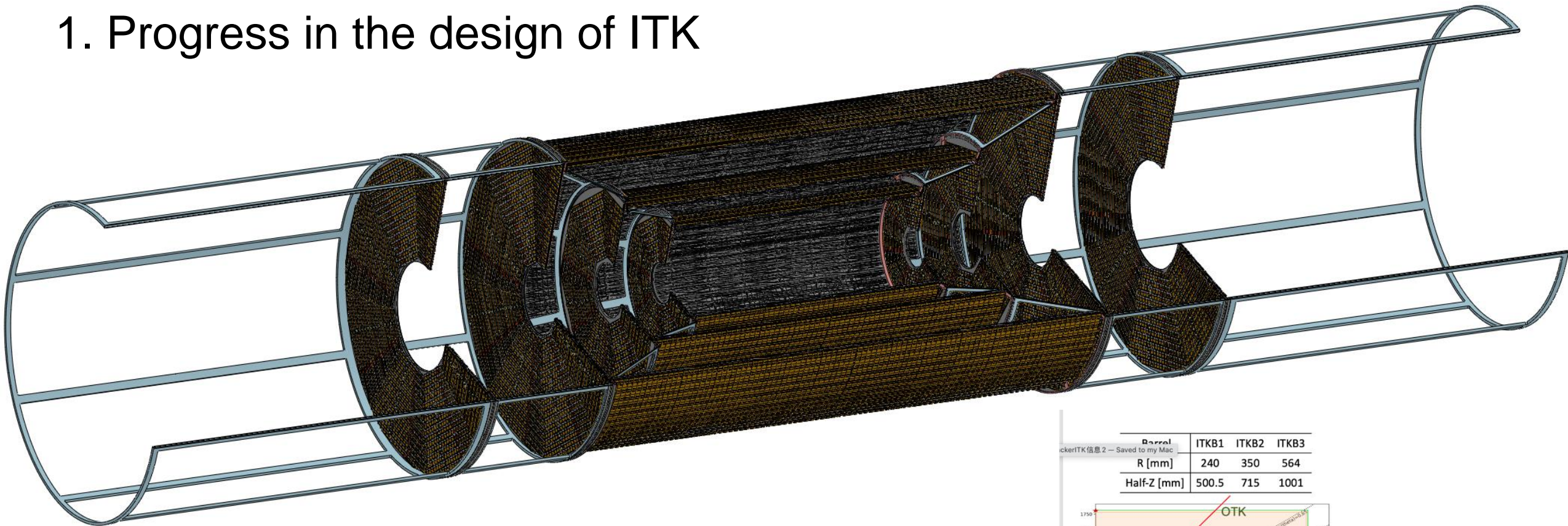


# Progress in mechanical design of CEPC detector TDR

Ji Quan

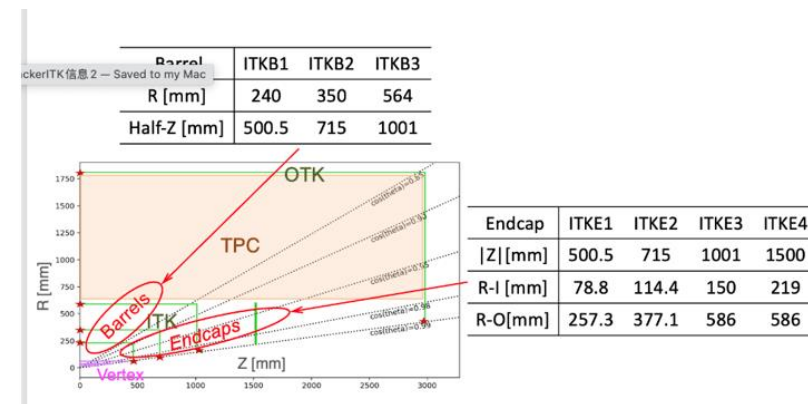
September 3, 2024

# 1. Progress in the design of ITK



1.1 Preliminary completion of the connection structure design for ITK  
(Barrel and End Cap)

1.2 Reserved the design of connection components with Beampipe and TPC

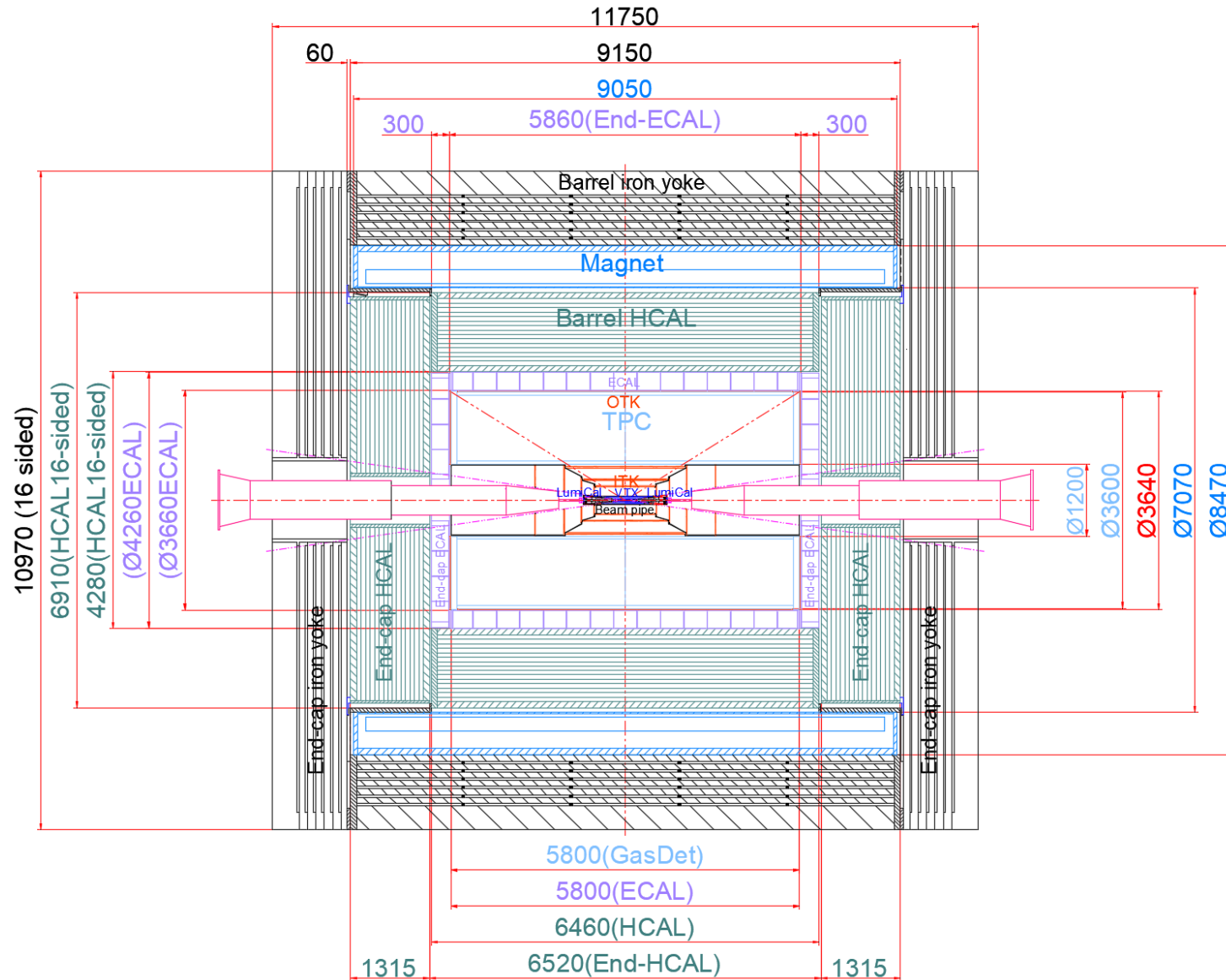


Design parameter (严琪)

Mechanical design :

Simulation analysis (structural and thermal), Structural optimization and parameter optimization

## 2. Completion status of the overall design



Update :  
**ITK**

Completed sections :

YOKE (夏商)  
Magnet (裴亚田, 侯治龙)  
HCAL(张俊嵩, 裴亚田)  
TPC (张俊嵩)  
**ITK (纪全)**  
Beampipe (何龙岩)  
LumiCAL (何龙岩)

Uncompleted sections :

ECAL  
OTK  
VERTEX

### 3. Completion status of the overall design

**Scheduling** --- Regular Mechanical Meetings

**Work plan :**

- 1) Complete the layout design of cable leads and pipelines
- 2) Complete the framework design of the sub detector and determine the design boundary
- 3) **Complete mechanical design according to the design requirements of the sub-detector**

**Complete :**

Within two weeks