Progress in mechanical design of CEPC detector TDR

Ji Quan May 6, 2024

Content:

- 1. Existing problems
- 2. How to work on mechanical design?

1. Existing problems

Undetermined detector design Undetermined mechanical design



Dimensions such as overall boundary and sub detector gaps

Insufficient design basis

More exchanges and discussions

More mechanical exchanges and discussions



Comparative mechanical design is also one of the important factors for selecting a solution

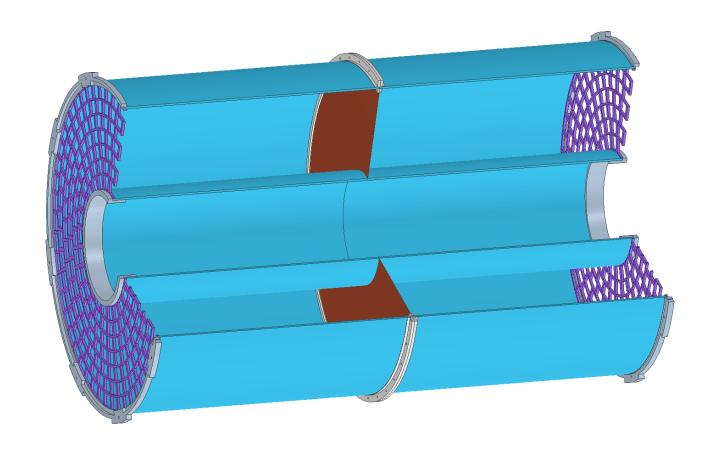
Two meetings were scheduled:

- 1. TPC 和 OTK 的接口设计讨论 (5月6日下午)
- 2. 机械方面的内部设计进展交流会 (5月7日下午)

Participated in a discussion:

1. 超导磁体的讨论

For example: The design steps of TPC (Qi huirong Zhang jian Zhang junsong)



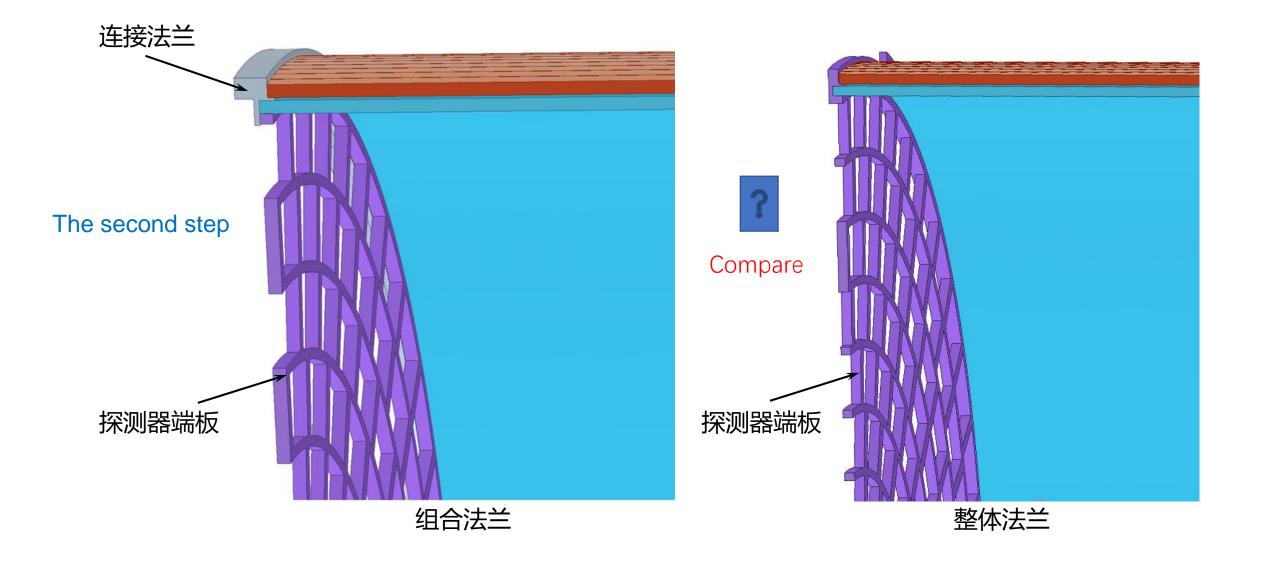
The first step:

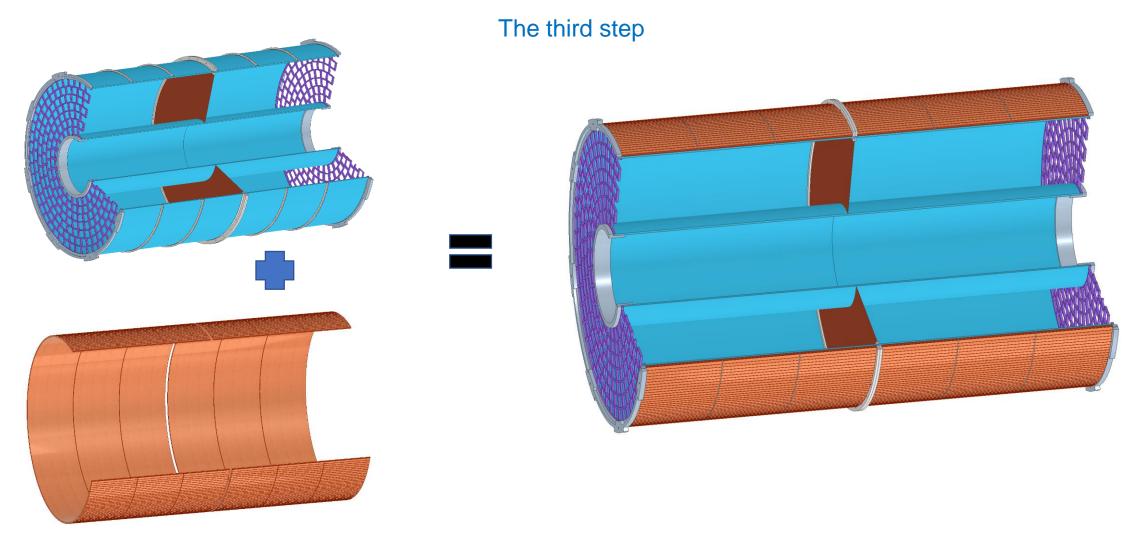
Overall framework of the detector

探测器工作原理到机械设计的工程转化 (关键的一步)



simulation analysis





Interface Discussion: TPC and Out tracker

Thanks