

CEPC Silicon Tracker Progress Report (20)

Qi Yan on behalf of the Silicon Tracker Group

Feb 18, 2025, IHEP

Status on Silicon Tracker Ref-TDR

Our group underwent the internal review of the Ref-TDR last Saturday (Feb 15):

<https://indico.ihep.ac.cn/event/25041/>

- Review participants:
Wang Meng, Ouyang Qun, Xiang Ming, Hongbo, He Miao, Mingshui, Wang Zheng, Jingbo, Ji Quan, Wei Wei, Li Gang, Mingyi, Zhijun, Tianchi, Jianchun, Zhaoru, ...
- Key discussions and feedback:
We will carefully consider the feedback and incorporate valuable suggestions into our Ref-TDR revision.

CEPC Silicon Tracker Ref-TDR Internal Review

📅 Saturday Feb 15, 2025, 9:00 AM → 4:00 PM Asia/Shanghai
📍 122 (多学科)

Description 加入 Zoom 会议
<https://us02web.zoom.us/j/96790161440?pwd=ZTFzc2NDVFpVdDNuRjVTaXEvOFRzd09>
会议号: 967 9016 1440
密码: 523011

9:00 AM → 9:15 AM **TDR overview**
Speaker: Qi Yan (IHEP)
 SiliconTrackerTDRR...

9:15 AM → 9:30 AM **Mechanical**
Speakers: Yujie Li (Henan Normal University), 宇杰 李
 Mechanical Design ... Mechanical Design ...

9:30 AM → 9:45 AM **Sensor chip + Prototyping of ITK**
Speaker: Yiming 一鸣 Li 李 (IHEP)
 sensor-prototype.pdf

9:45 AM → 10:00 AM **AC-LGAD chip design**
Speaker: Mei Zhao (高能所, IHEP)
 AC-LGAD Chip R&D...

10:00 AM → 10:15 AM **AC-LGAD test**
Speaker: Yunyun Fan (樊云云) (IHEP)

10:15 AM → 10:30 AM **Electronics**
Speaker: Xiongbo 严雄波 YAN Xiongbo (高能所)
 Tracker review elec...

Other activities last week:

- Visit Zhengzhou University of Light Industry, Fanrui Yihui (carbon fiber plant), Yutong (microchannel fabrication plant), and the Institute of Semiconductor, Henan Academy of Sciences for potential future cooperation.

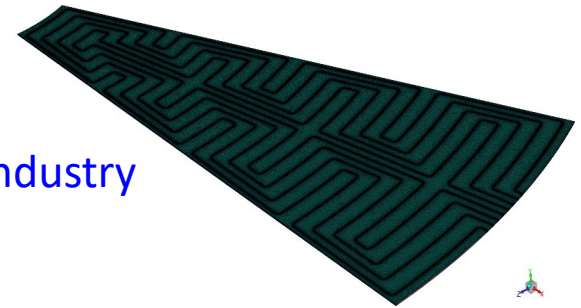
Ongoing work on Ref-TDR:

- Finalizing the optimization of ITK and OTK cooling loops and thermal analysis.



1/8 ITK endcap cooling loops

Zhengzhou University of Light Industry
(郑州轻工业大学) and Li Yujie



1/16 OTK endcap cooling loops

- Completing revision on the references and figure captions.
- Cost estimation.

Outline of Silicon Tracker Ref-TRD

Chapter 5 Silicon Trackers 总负责人: 严琪

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90% of the content has been implemented, with the full chapter nearing 100 pages.

CEPC Ref-TDR Silicon Tracker章节概况

致力于完成一个合理自洽的 Silicon Tracker 技术性设计报告 (Ref-TDR)。Silicon Tracker 章节的全部内容超过100页，是Ref-TDR中最大的一个章节。全部撰写工作需要在本月前完成，以应对4月份的国际评审。目前时间紧、任务重。

当前Ref-TDR填充完成的内容超过90%，剩下的少部分内容正在抓紧补充。同时，组里每个星期对整个章节进行阅读、讨论，以及修改。包括本人在内也把所有精力投入到对整个章节的撰写、整合和修改。希望能最终达到一定的技术水平，在能力范围内做到最好。虽然不能尽善尽美，也有许多不足的地方，请大家谅解。

特别感谢叶竞波近期在阅读后提供的宝贵反馈意见。我们也欢迎更多的人能花时间多读一读、提供建设性的意见，帮助一起更好地完成这部分的内容。

