

Mechanical Design and Future Prospects for the CEPC Silicon Tracker

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The CEPC silicon tracker (ITK and OTK) will cover a large sensor area of approximately 100 m². Achieving high performance requires minimizing the material budget while ensuring high structural strength and efficient cooling—a particular challenge for this large and sophisticated tracking system. This report presents the detailed mechanical and cooling design of the CEPC silicon tracker detectors, along with the planned R&D toward a prototype detector.

Primary author: LI, Yujie

Presenter: LI, Yujie

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