

CEPC Calorimeters: a brief summary of recent TDR meetings

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Brief summary of recent TDR meetings: dimensions

- ECAL and HCAL thickness remain the same
 - ECAL 300mm, HCAL 1315mm, respectively
 - Gap between ECAL-HCAL in barrel region: 10mm
- The main changes are as follows
 - The inner diameter of the barrel region of the tracker detector changed
 - Inner diameter of the barrel ECAL: 1900 mm -> 1830 mm
 - Inner diameter of the barrel HCAL also correspondingly shrinks
 - The length of the barrel region of the tracker detector has changed,
 - Length of the barrel ECAL: 5900 mm -> 5800 mm
 - Length of the barrel HCAL also correspondingly shrinks
- Gap between barrel and endcap regions of ECAL and HCAL reduced
 - 60 mm -> 30mm
- An update related to Outer Tracker (OTK)
 - Mechanics: to mount the endcap OTK on the endcap ECAL

Brief summary of recent TDR meetings: options

- ECAL
 - Mechanics: 10 mm carbon fiber seems too thick, need further optimisations
- HCAL
 - Scintillating glass: cost target in the range of 1-5 CNY/cc
- Calorimeter option selection
 - Need to prepare a proposal for decision making
- Timeline
 - International Review of CEPC reference detector TDR: first one planned in early July
 - Goals for CEPC calorimeter team
 - Provide a first **full design** of calorimeters with mechanics and electronics
 - Be able to **defend** for this design with supporting materials