# Towards A New Reference Design

- We want to have a new reference detector design, so that the subdetectors can be optimized within this frame.
  - Basing on the CDR design.
  - A full silicon tracker, + 1 or 2 drift chamber(s) mainly for dEdX PID.
  - A horizontal crystal bar (~1×1×40 $cm^3$) solution for the ECAL. The inner radius of ECAL ~1.8 m or ~1.5 m.
  - A HTS magnet between the ECAL & the HCAL, providing 3 Tesla for the Higgs runs and 2 Tesla for the Z pole runs.
- We are recruiting manpower to implement the reference design. You are welcome to join the effort.
- Aim to have something for the CEPC workshop at the end of October.
- A mini workshop @ Dongguan, Aug 28-29, emphasizes on the mechanical requirements. The main motivation is to bring the mechanical design work up to speed. https://indico.ihep.ac.cn/event/12324/