

Introductory remarks

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Introduction

- **Review of plans from each group towards CDR**

- Today:
 - Physics & simulation
 - Silicon Tracker and VTX
 - MDI
- Next meeting, December 5, 2 pm
 - TPC
 - Calorimeter
 - Magnet
- SHORT reports on the plans for the CDR
 - What should be included
 - A short timescale to accomplish the work
 - List of resources you have
 - List of challenges or possible limitations/concerns.



Introduction

- **Second Meeting of CEPC-SppC International Advisory Committee, Nov. 7-8**

- <http://indico.ihep.ac.cn/event/6440/>

- **Final report recommendations:**

- The detector design and technology choices will profit substantially from experience with state-of-the art **detectors currently in operation** and their upgrades (e.g. LHC and HL- LHC) as well as from ongoing detector developments for **future e+e- colliders** (e.g. ILC, CLIC, and FCC-ee).
 - Exploit synergies with such existing efforts through targeted Chinese contributions to these projects as well as by attracting CEPC participation from these communities.
- Set up **working groups** for the detector optimization and physics benchmark studies with regular meetings that welcome international participants (create mailing lists and use the indico site for remote participation).
 - Where feasible, working groups should be co-chaired by a Chinese and a foreign expert.
- **International participation** can evolve from informal individual contributions to a formal non-engaging MOU with individual institutes or alternatively to an MOU describing tasks and deliverables.
- International involvement can be stimulated by allocating **CDR/TDR editorial roles** (main co-editor or chapters co-editor) to foreign participants.
- No need to repeat full-detector simulation studies for many sub-detector technology options. Once the requirements are understood, specifics of **alternative sub-detector technologies** can be addressed individually.
 - CDR and the physics benchmarks can generally focus **on one detector concept**, while alternative technology options can be mentioned in the sub-detector chapters of the CDR.
- Limit the investment in detector technology **R&D to critical elements** where CEPC requirements are challenging and not yet proven in existing prototypes.
- The **TPC technology** may not meet the requirements for detector operation at the Z-peak (in view of the expected high rates and ion feedback issues).
 - Assess this issue at an early stage and taking a timely decision on whether the TPC is an optimal choice for the CEPC tracker.