Charge to the CEPC International Advisory Committee

October, 2020

The Circular Electron Positron Collider（CEPC+SppC）Study Group, currently hosted by the Institute of High Energy Physics of the Chinese Academy of Sciences, has been developing the technical design of the CEPC accelerator, continues to refine the design to enhance the performance of the accelerator and the detectors, and is carrying out the R&D program, the development of its software, and the site preparation.

The present goals of the CEPC Study Group remain to be the completion of the necessary R&D work and the Technical Design Report, the demonstration of the validity of critical subsystems, the enhancement of the organization and global collaboration.

The CEPC International Advisory Committee shall advise on all related matters for the CEPC project, in particular on the following aspects:

1. Are the accelerator TDR, overall R&D, and design enhancement on track? How and where can the CEPC team innovate and make the CEPC accelerator and detector best they can be?
2. The European Particle Physics Strategy Update (EPPSU) was released in June 2020, which places the e+e- Higgs factory at the highest priority for a future facility, and the US Snowmass process has begun. How should CEPC R&D and future work be coordinated internationally and make major impact on the future accelerator project regardless where the e+e- Higgs factory will be built?
3. In light of the new global reality, how should we carry out international collaboration with the CEPC?

We would very much appreciate additional guidance on global TDR, R&D and international collaboration. The committee is invited to give suggestions on any aspect of CEPC beyond those specifically included in this charge.

It is requested that a committee report responding to this charge be delivered to the IHEP director Yifang Wang by December 1, 2020.

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