**Minutes of CEPC Accelerator meeting**

2015.7.10

**Place**: Room C407, Main building, IHEP

**Convener**: Jie Gao

**Attendee**: Jie Gao, Huiping Geng, Chuang Zhang, Yuan Zhang, Yuanyuan Guo, Xiaohao Cui, Yiwei Wang, Sha Bai, Feng Su, Dou Wang, Tianjian Bian, Ming Xiao, Teng Yue

**Recorder**：Dou Wang

**Summary of minutes：**

* 1. Prof. Jie Gao introduced today’s topic:

1. More sextupole families in CEPC main ring

2) The principle of beam-beam compensation.

* 1. Huiping Geng introduced her progress on main ring dynamic aperture. The key points are as follows:

1) Tried a few new working points and no larger DA has been found.

2) See the effect of more turns for DA tracking without radiation damping. Longer tracking time give smaller DA for off-momentum particle.

3) CEPC DA with six families sextupoles is not better than the one with two families.

* 1. Discussion:

1) Prof. Jie Gao suggested to use previous lattice of main ring (Yiwei and Dou Wang have used) for DA study.

2) Prof. Chuang Zhang suggested to form a ring with pure FODO cell and then try to find the reasons for small DA.

3) Prof. Jie Gao suggested Yuan Zhang to show some BEPCII results about chromaticity correction and DA, in order to make a comparison between CEPC and a smaller ring.

* 1. Guo Yuanyuan gave an introduction to beam-beam compensation.

1. Introduction of two beam-beam compensation schemes: direct space charge compensation and indirect space charge compensation.
2. Introduction of two types of beam-beam compensation scheme with four beams and the principle of these schemes.
3. Showing some simulation results.
   1. Plan for future work
4. Tianjian Bian start to work together with Prof. Chuang Zhang and Xiaohao Cui on CEPC booster as his Ph.D these topic.
5. Teng Yue give a report on background two weeks later.
6. Ming Xiao prepare a talk about progress of partial double ring scheme for next regular meeting.
7. Bai Sha talk about CEPC orbit correction, maybe also MDI progress next regular meeting.

Recorder：Dou Wang

Checkup：Jie Gao

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