

# Proposal of ITF Subgroups in 2023

Y. Ohnishi



# Five Subgroups in International Task Force

Proposal of 2023 activity (January - December)

Dec. 12, 2022 Y. Ohnishi

Group Name	Chairperson	Deputy Chairperson	Remarks
Beam Tuning	Y. Ohnishi <sup>A</sup>	H. Sugimoto <sup>A</sup>	strategy of beam commissioning and machine study, optics issues, beam lifetime and dynamic aperture, beam monitors and magnets, everything is included
Collective Effect	G. Mitsuka <sup>A</sup>	M. Migliorati <sup>B</sup> , A. Blednykh <sup>C</sup> , N. Wang <sup>D</sup> , D. Zhou <sup>A</sup> , T. Ishibashi <sup>A</sup>	improvement of luminosity performance, understanding of beam-beam interaction, single-bunch and multi-bunch instabilities, impedance budget, beam halo
Beam Injection	N. Iida <sup>A</sup>	T. Yoshimoto <sup>A</sup>	understanding and improvement of injection efficiency, beam blowup in the beam transport lines, stability of beam injection, quality control of injected beams, linac tuning
Sudden Beam Loss	H. Ikeda <sup>A</sup>	H. Nakayama <sup>A</sup>	understanding the mechanism, consideration of beam monitors, machine protections
IR Upgrade	D. Zhou <sup>A</sup>	X. Wang <sup>A</sup> , (CERN), (IHEP), (BNL), etc.	upgrade path for LS2, reduce lattice nonlinearity, improvement of field quality, separation from solenoid field, discard offset of beam orbit to reduce fringe effects



### **Collective Effect Group**

suggested by D. Zhou

Chairperson: G. Mitsuka (Coordination of collaborations on measurements of collective effects in SuperKEKB)

#### Deputy chairpersons:

- T. Ishibashi (Coordination of activities on impedance modeling for SuperKEKB)
- D. Zhou (Coordination of collaborations on beam-beam effects in SuperKEKB)
- M. Migliorati (Representative of FCC-ee, Coordination of SuperKEKB and FCC-ee collaboration on collective effects)
- N. Wang (Representative of CEPC, Coordination of SuperKEKB and CEPC collaboration on collective effects)
- A. Blednykh (Representative of EIC, Coordination of SuperKEKB and EIC collaboration on collective effects)

# SuperKEKB

## **Charge of ITF Subgroup**

- The IFT activity is extended for another year. This proposal covers the period through the end of 2023.
  - No machine operation for 2023ab (February July), we have to discuss things based on data until 2022.
- The chairperson, together with the deputy chairpersons, determines the direction of subgroup. The chairperson makes a final decision.
  - We are welcome anybody wants to be a deputy chairperson from foreign institutes.
- The chairperson and deputy chairpersons select the items to be discussed and preside over the meeting. The meeting should be held at least once a month (or two months?).
  - There is a difficulty in choosing the time of the meeting (Japan-Europe-US). 17:00- or 21:00-
  - We have 5 subgroups, so meetings will be held every week in average. If one try to attend all meeting, is it possible?
  - We may use e-mail or an instant message program such as "Slack" to make up for the meeting.
  - "Slack" and "Mattermost" are very useful for sharing information. We have already used it at SuperKEKB.
- The items include short-term (for Phase 4 after LS1) and long-term issues (Phase 5 for LS2 and after).
- Summary report from each subgroup should be written by the end of 2023 as well as the 2022 activities.