

INPUT TO IDT-ILD DISCUSSION

Technical matters

IDT-WG3: MDI ACTIVITIES

MDI-CFS Taskforce: Detector Hall and Campus:

*Well on track
under ILD lead
(Karsten's talk)*

- WG2: H. Hayano (CFS), N. Terunuma (CFS), T. Sanuki (Site)
- WG3-MDI: K. Buesser (MDI convener and ILD), Y. Sugimoto (MDI convener and ILD), T. Tauchi (BDS and seismic issues), Y. Makida (detector SC magnet), T. Markiewicz (SiD), M. Stanitzki (SiD), P. Burrows (CLICdp), T. Schoerner-Sadenius, K. Sinram.

Common taskforce revived with representatives of local site / accelerator / LC detector concept groups

Main current focus on an updated design of the Surface facilities and Detector Hall

Ongoing work based on local site constraints & opportunities, detector needs and experience from LHC@CERN

IDT-WG3: MDI ACTIVITIES cont'd

Taskforce on impact of Beam Delivery System on detectors design and specific physics reach

Expected contributors: WG3-MDI/D&T/Soft/Phys + WG2 + **detector concepts**
Task force(s) to be set up under the lead of the WG3-MDI subgroup
(R. Poeschl specifically in charge)

A few current trends:

Larger L^* option as revived at LCWS2021 not in Prelab accelerator priorities
Some focus on delivered beam parameter measurements for machine and experiments:
polarization, luminosity, beam energy and real time monitoring

ILD contributions expected from FCAL teams / BG simulation /...
A change of L^* would require strong arguments from ILD

The most sensitive issue!

IDT-WG3: DETECTOR&TECHNOLOGY ACTIVITIES

Taskforce on detector performance studies

Coordination of performance studies including emerging technologies and alternative detector solutions

Expected contributors: WG3-D&T/Soft/Phys + **concepts** + R&D community

Taskforce to be set up under the lead of the WG3-D&T subgroup

Current trends:

- Survey of openings of PHD and Postdoc positions for detector performance evaluation
- Survey of available software tools for detector and technology performance evaluations
- Definition of an agreed set of rules for performance quantification of detector options

Organisation of a kick-off open mini-workshop on detector technologies similar to that reported by Aidan for physics

A few personal suggestions made to D&T conveners:

- Focus on tools already available in the Concept groups
 - ***connect new groups to the concept groups through guest membership applications***
- Establish direct exchange with Concept groups on their plans & resources:
 - postdocs & PHDs in groups
 - specific software opportunities (e.g. hybrid simulations for ILD)
 - openness to new technologies
 - definition of common benchmarks for detector performance evaluation
 - ***organize zoom discussion(s) with ILD and SiD Managements ?***
- Use the October ILCX workshop as a milestone to guide contributions towards the WS sessions

2 outstanding questions for ILD:

- ***Openness to new groups proposing a full Si tracker option ?***
- ***Take initiative for a detailed comparison of the TPC & Si tracker options ?***
(possible now from ILD-S/CLICdp comparison)