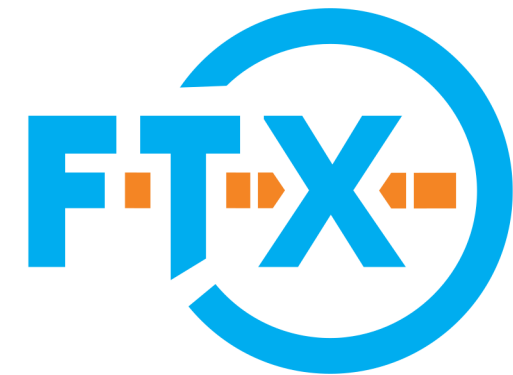




Update from IDT-WG3 & LCWS

ILD Physics Coordinators Report

Jenny List (DESY)
ILD Software & Analysis Meeting, Jan 27 2021



IDT-WG3: Physics & Detectors

what happened so far....

- Since summer 2020:
 - WG3 chaired by Hitoshi Murayama
 - a core WG3 was formed, to a large extent based on the former LCC Physics & Detector EB
 - ~monthly meetings for exchange on global ILC activities & politics
 - main goal of WG3 for the IDT period: (re-)build the ILC community!

=> create a structure of active WGs, with open bottom-up participation, to discuss and work on physics, detectors, software etc

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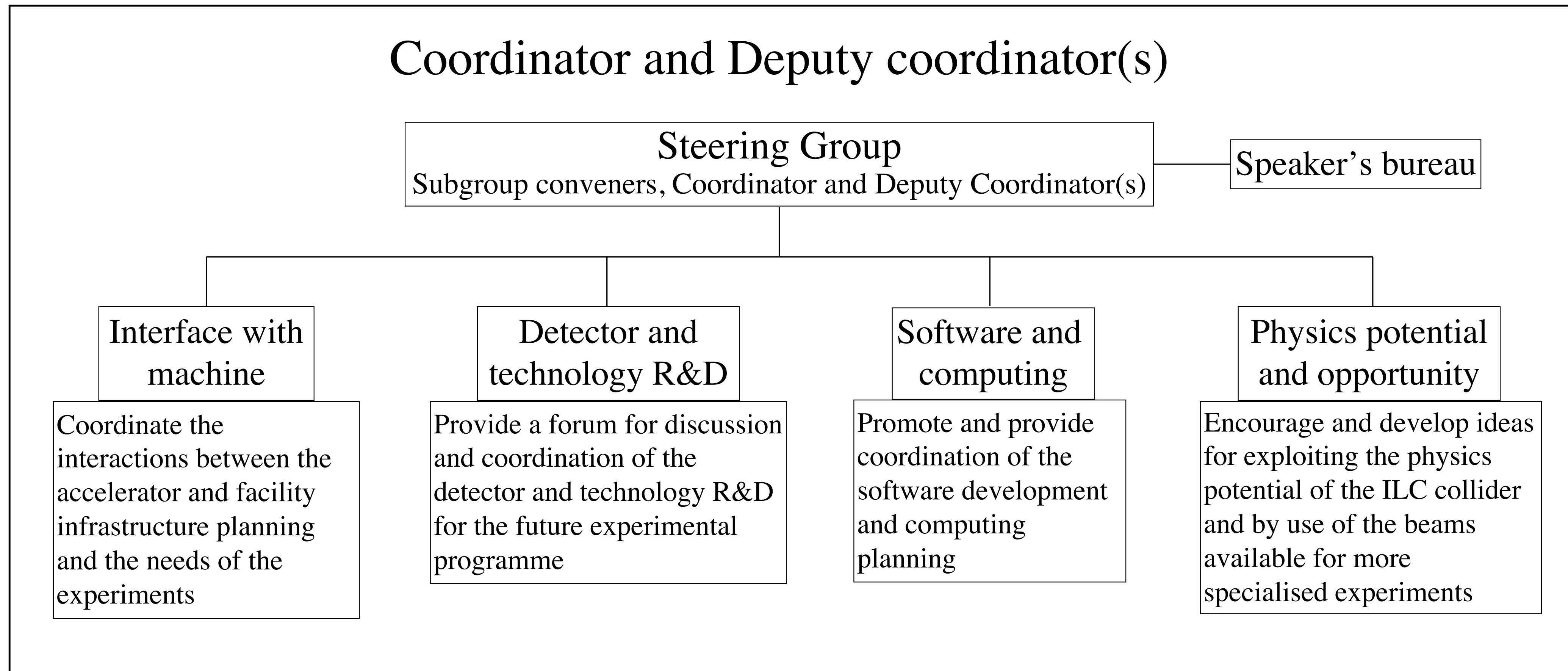
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WG3 Structure

Chair, Steering Group, Speakers Bureau, 4 Topical WGs

WG3 Organisation and mandates



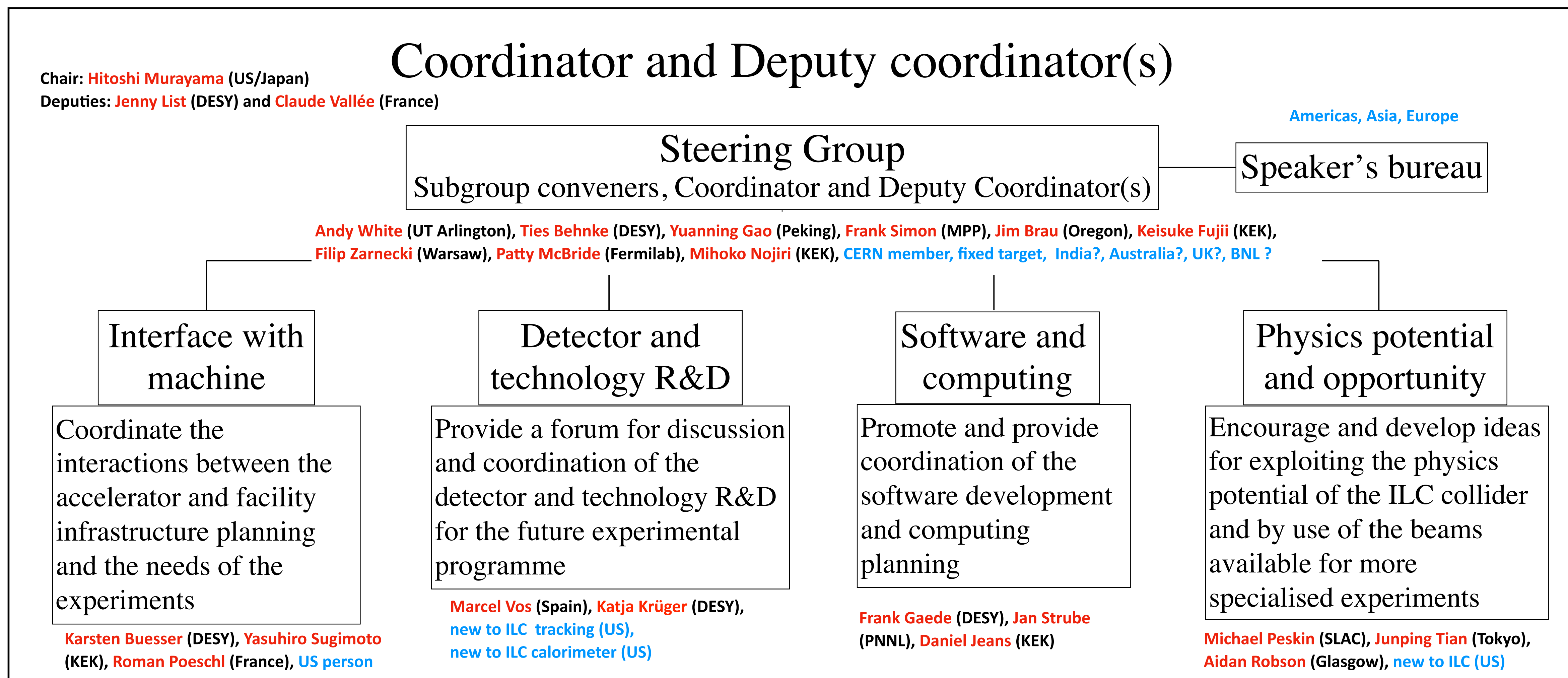
WG3 Structure

additional considerations

- small number of conveners per WG, but charged to form
 - broad participation
 - subgroups / task forces as needed (in particular for “physics”)
- mix of experienced (I)LC people and newcomers
- conveners should be able to comit a substancial amount of their time
- detailed WG charges / plans will be discussed and agreed together with WG3 steering group
- make a serious attempt with regional and gender balance

Status of Appointments (red = accepted, blue = not yet asked / responded)

WG3 Organisation and mandates



WG3 Next Steps

the way forward

- last night had the last meeting of the “old”, “LCCPDeb-like” WG3
- Feb 9, the new WG3 Steering Group will meet for the first time, with the conveners of the four WGs, probably then keep bi-weekly rhythm
- rather quickly converge on more detailed plans for each WG of how to reach out and re-engage the community (as far as possible without serious funding...)
- “big Workshops”
 - LCWS -> see following slides
 - WG3 already starts thinking about Workshop on the Experimental Program at the ILC planned for Oct 25-28 (in Japan ?)
- beyond that, envision regular, continuous topical WG activities

LCWS 2021 Planning

Status Overview

- March 15-18, fully virtually, hosted by CERN
- Organisation started late (Covid19, WG3 structure, Xmas, ...)
- For practical purposes driven so far by the “Local” Organizing Committee, led by Steinar Stapnes
- Program committee and International Advisory Committee invited (and so far 95% accepted)
- Parallel session conveners are being invited
Overlap with PC minimized but not completely zero - we have to become more! :-)
- Webpage being set up: <https://indico.cern.ch/event/995633/>
- No fee, but registration will be required for book-keeping and data protection reasons
- Overarching goal: broaden the community => healthy mix of information for newbies and opportunities to present & discuss ongoing work!

Timetable

Proposal to the Program Committee

- Plenaries:
 - at international prime-time
 - no Webinar, but regular (interactive) zoom
- Parallels:
 - some at further “international times” => very inconvenient in Europe
 - in order to encourage European bottom-up participation, also offer slots in the (European) morning (nonUS compatible)
- Optionally: Poster Sessions, virtual coffee breaks - possibly can piggy-back on conference tool (remo.co) to be purchased by DESY for EPS-HEP 2021???
- Further details of the program tbd with the full Program Committee, aiming for 1st meeting in early February

Date/Time shown is for CERN time

Date	Time	Session
Mon, March 15	14:00-17:00	PLENARY
Mon, March 15	22:00-01:00	Possible Parallel
Tue, March 16	06:00-09:00	Possible Parallel
Tue, March 16	09:30-12:30	Possible Parallel
Tue, March 16	14:00-17:00	PLENARY
Tue, March 16	22:00-01:00	Possible Parallel
Wed, March 17	06:00-09:00	Possible Parallel
Wed, March 17	09:30-12:30	Possible Parallel
Wed, March 17	14:00-17:00	PLENARY
Wed, March 17	22:00-01:00	Possible Parallel
Thu, March 18	06:00-09:00	Possible Parallel
Thu, March 18	09:30-12:30	Possible Parallel
Thu, March 18	14:00-17:00	PLENARY

Parallel Tracks

in the WG3 realm

Name	Content	WG3
Theory	Calculation, Model Building, MC generators	Phys
Interpretations	EFT, global fits etc...	Phys
Physics Analyses	physics-oriented analyses of individual channels	Phys
Detector Performance	performance studies, high-level reconstruction of physics objects, calibration	Phys/Soft
Software	framework, simulation, (basic) reconstruction, grid tools etc	Soft
Tracking Detectors	Tracking and Vertex detector R&D	Det
Calorimeters	Calorimeter and Muon system R&D, DAQ	Det
Interfaces	MDI, Integration, Site planning, ...	Interface

- plus parallel track towards EoI preparation:
 - new technology/ideas for collider experiments; Fixed target, beam dumps & Co
 - conveners from Theory, Collider Exp, Non-collider Exp, Accelerator, MDI => not yet fixed

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3-5 conveners invited per session

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Further News

CERN Courier Jan/Feb issue features physics program of Higgs factories

FEATURES

HIGGS PHYSICS

Targeting a Higgs factory

An electron-positron collider following the LHC would yield precise knowledge of the Higgs boson. **23**



Source: R. Ellis

BEYOND A HIGGS FACTORY

FCC-ee

A 100 km circular electron-positron collider would be the first stage towards a 100 TeV proton-proton collider. **29**

ILC

High-luminosity, polarised beams and the triggerless operation of detectors offer rich physics opportunities. **35**

CLIC

The precision of a lepton collider and the high-energy reach of multi-TeV collisions has great discovery potential. **39**

Enjoy!

- for any issues with the LC indico hosted at CERN (<https://agenda.linearcollider.org>), **contact Tomohiko** he's appointed as official contact by IDT.

