

ICFA

## ILC International Development Team

### Executive Board

*Americas Liaison* Andrew Lankford (UC Irvine)  
*Working Group 2 Chair* Shinichiro Michizono (KEK)  
*Working Group 3 Chair* Hitoshi Murayama (UC Berkeley/U. Tokyo)  
*Executive Board Chair and Working Group 1 Chair* Tatsuya Nakada (EPFL)  
*KEK Liaison* Yasuhiro Okada (KEK)  
*Europe Liaison* Steinar Stapnes (CERN)  
*Asia-Pacific Liaison* Geoffrey Taylor (U. Melbourne)

**Working Group 1**  
Pre-Lab Setup

**Working Group 2**  
Accelerator

**Working Group 3**  
Physics & Detectors

See presentation  
of B.List

See presentation  
of J.List

# WG1 and EB

WG1 is being set up with representation from/nominated by major labs in some cases in consultation with FAs (around ~5 per region)

In Europe nominations from the Lab Directors Group (LDG)

First meeting 28.12, second next week

- Status of deliverable planning
- Organization of prelab
- Legal status
- Conditions for and how to start the prelab

EB meets weekly

Preparation of WG1 issues

WG2 and WG2 reports and discussion

- Deliverables
- Planning in Japan

(recent report: [http://jahep-ilc.org/files/ILC\\_JP\\_update\\_20210116\\_E.pdf](http://jahep-ilc.org/files/ILC_JP_update_20210116_E.pdf))

Recent Progress Towards the Realization of the ILC in Japan:  
Cooperative Efforts by Academia, Industry, and Local Region

January 16, 2021

JAHEP ILC Steering Panel<sup>1</sup>

- Membership and organization, lately mostly linked to WG3
- Timelines – for example for experimental programme starting with Eols ..
- Workshops

Communication and Newslines

# JAHEP ILC Steering Panel

- In October 2020, the Japan High Energy Physics Committee (HEPC) that represents the Japanese high energy physics community (Japan Association of High Energy Physics – JAHEP) established the ILC Steering Panel to accelerate community-wide efforts to realize the ILC.
- The ILC Steering Panel, chaired by Satoru Yamashita, is charged to lead the community to advance the ILC project and actively cooperate with other scientific communities, government authorities, legislators, corporate leaders, regional governments, and media, as well as international communities and authorities, toward timely realization of the ILC in Japan.
- The Panel is expected to work closely with the ILC International Development Team and KEK.

## **ILC Steering Panel Members :**

Shoji Asai (University of Tokyo)  
Kazunori Hanagaki (KEK)  
Toru Iijima (Nagoya University)  
Kiyotomo Kawagoe (Kyushu University)  
Sachio Komamiya (Waseda University)  
Shinichiro Michizono (KEK)  
Toshinori Mori (University of Tokyo)  
Hitoshi Murayama (UC Berkeley/University of Tokyo)  
Yutaka Ushiroda (KEK)  
Hitoshi Yamamoto (Tohoku University/IFIC Valencia)  
Satoru Yamashita (University of Tokyo) – Chair

## ANNOUNCEMENTS

# Two workshops 2021 – Please mark your calendars

by Tatsuya Nakada, Hitoshi Murayama and Steinar Stapnes

**The 2021 International Workshop on Linear Colliders (LCWS 2021)** will be arranged by Europe/CERN as a remote meeting from 15 to 19 March next year. Similar to the past meetings, it will cover the physics, detector, and accelerator studies of ILC and CLIC. The meeting will be at a timely moment since the European Strategy for Particle Physics Update has been published and its implementation started. Also, the ILC International Development Team and its working groups have been set up and detailed plans for the ILC Pre-lab are being made. In parallel, the Snowmass process is on-going. This workshop will be followed by individual more specialized ones for ILC and CLIC in the autumn 2021. We are looking forward to “seeing” you all in March.



The ILC International Development Team (IDT) will hold a workshop, **Towards ILC Expressions of Interest**, in October 2021 in Tsukuba, Japan, with focus on the experimental programme of the ILC. The main meeting will take place from 26 to 29 October with an optional tour to the ILC candidate site in the Tohoku region of Japan, as well as satellite meetings before and after the main meeting. The discussion will be centred around the steps toward the Expressions of Interest for the experiments at the ILC. It will also include discussions of recent developments in detector technology and provide updated information about the Pre-lab planning and the general status of the ILC project. Further details will follow soon.



# What is needed now ?

## Pre-lab planning: two main entry points:

- Pursue R&D interests and capabilities, link to “local” strategic interests [Scientific and Technical Collaboration]
  - For some countries and groups this is the easiest entry point to Pre-lab contributions
- Identification and preparation of ILC deliverables – one main one is a European SRF module line, then other individual WBS items [Qualify to deliver specific parts]
  - SRF module production line requires a multinational approach, other deliverable are a good entry point for countries and groups, linking to capabilities and industry

## Involving Europe in the IDT:

- Participation in IDT WGs from Europe systematically encouraged (but not complete)
- European monthly information meetings ([link](#)), next Wednesday 27.1 10-12:00

## Mapping of European Prelab planning (first overview by end February) for the accelerator:

- SRF capabilities in Europe (labs and industry) to be consolidated into a model for ILC cryomodule production (SRF discussion ongoing) – see next slides
- Similar for the other accelerator parts

## “National contacts/communities” actively planning for the next five years (IDT and Pre-lab period) and beyond for ILC

- Examples from UK, CERN, Spain





# The ILC-IDT goals

## Establish

- A preliminary list of Pre-lab tasks and deliverables and national/regional laboratories which might be interested in contributing to those
- Pre-lab resource needs for the regional activities and central office (a few % of the ILC cost)
  - List of task with resources estimate exists, being reviewed in next months, regional planning underway as indicated above
- A preliminary proposal for the Pre-lab organisation and governance by the end of this year (first WG1 meeting took place 28.12)

⇒ Needed for the Pre-lab Japanese funding request preparation by KEK in 2021 to obtain funding in 2022: a similar requirements for the other countries expected.

- During 2021: Finalise all the inputs needed to set-up the Pre-lab
- Attract more (new) people for the physics and detector activities by
  - During the next Linear Collider workshop (LCWS series, i.e. both CLIC and ILC) in Spring 2021 in Europe (will be remote), include a broad discussion/session on the ILC physics opportunities
  - Organising a dedicated workshop in Autumn 2021 to discuss ideas for experiments at the ILC, at the collision point and beyond covering a broad physics spectra, and associated R&D activities.





## 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
- Committees invited (95% accepted), parallel sess. conveners have also been invited  
Overlap 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](https://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	Phys
Detector Performance	performance studies, high-level reconstruction of physics objects, calibration	Phys/Soft
Software	framework, simulation, reconstruction, grid tools etc	Soft
Tracking Detectors	Tracking and detector R&D	Det
Calorimeters	Calorimetry and Muon system R&D, DAQ	Det
Interfaces	MDI, Integration, Site planning, ...	Interface

**3-5 conveners invited per session**

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

Accelerator session follow WG2 substructure, with conveners from both CLIC and ILC (overlaps with what earlier was called Combined WGs)

SRF purely ILC, CFS mostly ILC, the rest combined.  
Accelerator plenary also combined