



Welcome

European ILC community meeting



Wednesday Nov 4, 2020, 10:00 AM → 12:05 PM Europe/Zurich

Steinar Stapnes (CERN) , Thomas Schoerner-Sadenius (Deutsches Elektronen-Synchrotron (DE))

Description Join Zoom Meeting

ZOOM connection

Meeting ID: 993 4171 8959

Passcode: 190525

Find your local number: <https://desy.zoom.us/j/99341718959>

10:00 AM → 10:15 AM **Welcome, News, IDT overall and WG1**

Speaker: Steinar Stapnes (CERN)

🕒 15m



10:25 AM → 10:40 AM **IDT WG2 (accelerators) - news and issues**

Speaker: Benno List (DESY)

🕒 15m



10:50 AM → 11:05 AM **IDT WG3 (detector and physics) - including timeline issues**

Speaker: Frank Simon

🕒 15m



11:15 AM → 11:30 AM **Short news from labs/countries/FA ...**

🕒 15m



11:45 AM → 11:55 AM **AOB**

Plenary ECFA

LCWS in Europe in Spring

🕒 10m



Americas WS on LCs

Americas LC workshop – IDT report:



Pre-lab accelerator activities

- **Technical preparations & SRF R&D for cost reduction** [shared across regions]
 - SRF performance R&D
 - Positron source final design and verification
 - Nanobeams (ATF3 and related): Interaction region: beam focus, control and Damping ring: fast kicker, feedback
 - Beam dump: system design, beam window, cooling water circulation
 - Other technical developments considered performance critical
- **Final technical design and documentation** [central office in Japan with a support from other labs]
 - Engineering design and documentation, WBS
 - Cost confirmation/estimates, tender and purchase preparation, transport planning, mass-production planning and QA plans, schedule follow up and construction schedule preparation
 - Site planning including environmental studies, civil engineering, safety and infrastructure (see below for details)
 - Review office
 - Resource follow up and planning (including human resources)
- **Preparation and planning of deliverables** [distributed across regions coordinated by the central office]
 - Prototyping and qualification in local industries and laboratories, from SRF production lines to individual WBS items
 - Local infrastructure development including preparation for the construction phase
 - Financial follow up, planning and strategies for these activities
- **Civil engineering, local infrastructure and site** [mainly by the Japanese institutions]
 - Engineering design including cost confirmation/estimate
 - Environmental impact assessment and land access
 - Specification update of the underground areas including the experimental hall
 - Specification update for the surface building for technical scientific and administrative needs

Pre-lab physics and detector activities

- **Preparing the ILC physics programme** by
 - setting up the ILC Committee (ILCC) as a programme committee for the ILC at the start of the Pre-lab.
 - Call for Expressions of Interest (EoIs) after ~0.5 year for experiments covering a broad physics spectra which can be done at the ILC.
 - Call for Letters of Intent (LoIs) about one year after the EoIs. The ILCC will select a subset of LoIs to proceed for the next step.
 - Call for a Technical Proposal/Technical Design Report shortly before the transition to the ILC Laboratory, where the final approval of the experiments will be made by the ILC Laboratory.
- **Approving and monitoring of the progress for the detector R&D programme** by the ILCC.
- **Organising occasional physics workshops** to reflect on the on-going progress relevant for the ILC physics.

This timeline is the current IDT thoughts and the actual implementation will be led by the Pre-lab directorate

Intended IDT goals for this year

- Try to 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)
 - a preliminary **proposal for the Pre-lab organisation and governance** by the end of this year.
 - ⇒ **Needed for the Pre-lab Japanese funding request** preparation by KEK in 2021 to obtain funding in 2022: a similar requirement for the other countries expected.

IDT activities for the next year include

- Finalise **all the inputs needed to set-up the Pre-lab**
- Try to attract more (new) people for the physics and detector activities by
 - Encouraging the next Linear Collider workshop (LCWS series) in spring 2021 in Europe where the programme could include a broad discussion on the ILC physics opportunities. (see talk by S. Stapnes)
 - Organising **a dedicated workshop in autumn 2021** to discuss ideas for experiments at the ILC, at the collision point and beyond covering broad physics spectra, and associated R&D activities.

See talks later of Benno and Frank

Following up

From the IDT report we can conclude:

Accelerator - next:

- Urgent to build a table of European interests (R&D and possible deliverables)
- Need a SCRF discussion meeting for a module prod. model for Europe

Detector and Physics – next:

- ILC community build-up a priority, use workshops next year
- LCWS in Europe in Spring - set up committee and determine date
 - For ILC and CLIC, must include “EoI” physics session(s) for ILC (or maybe LCs generally)

Americas WS on LCs



Americas LC workshop – US interest and capabilities clearly presented

Perspectives on ILC Physics	Hitoshi Murayama	
Zoom	14:00 - 14:45	
Discussion on timeline for proposal and construction of ILC detectors	Frank Simon	
Zoom	14:45 - 15:10	
US government views of the ILC - DOE	Dr Chris Fall	
Zoom	15:10 - 15:20	
US government views of the ILC - NSF	Dr Saul Gonzalez	
Zoom	15:20 - 15:30	
US government views of the ILC - State Department	L. Reece Smyth	
Zoom	15:30 - 15:40	
Panel Discussion: Americas Participation in the ILC	Paul Grannis	
Zoom	15:40 - 16:30	
Moving forward with the ILC	Geoffrey Norman Taylor	
Zoom		



Americas Workshop on Linear Colliders 2020

19-22 October 2020
Zoom
US/Pacific timezone

SRF Cryomodule Production for the ILC: FNAL, MSU, J-LAB

SRF Component Treatment, Design, & Test: Cornell, ANL, J-LAB, ORNL, MSU, FNAL

Beam Physics, Simulation, Damping Ring Dynamics, Beam Delivery System, & Sources: BNL, ANL, LBL, Cornell, SLAC, J-LAB

Magnets –Wigglers, Undulators, Quadrupoles, IR Magnets: FNAL, LBL, BNL, FNAL

Key Ancillary Systems: SLAC, LBL, FNAL

Accelerator R&D for Future: FNAL, J-LAB, LBL, ANL

Other updates

- WG1 nominations for Europe ongoing
- Increased participation in WG2 and 3 from Europe – but not completed
 - And what do we do with the fact that we cannot have every country in WG3, but we do want every country and group to be informed and involved (WSs every 6 months not sufficient) ?
- PECFA presentation 19.11: <https://indico.cern.ch/event/966397/>

CERN – KEK agreement for the ILC IDT – being signed



CERN will facilitate the European participation in the work during the transition to the Pre-Lab Phase; including working groups on Pre-Lab preparation, accelerator and facility, and physics and detectors.

CERN will coordinate the European contributions to the Team's common fund, as well as the in-kind contributions to the tasks supported by the common fund during the preparation of the Pre-Lab Phase.

Collaborative work in studies related to:

- the accelerator's beam-delivery system and the Accelerator Test Facility 2 (ATF2)
- high gradient acceleration for linear colliders;
- high efficiency klystrons
- detector, physics and software
- cryogenics systems, beam-dumps, superconducting radiofrequency (SC RF) module components and technologies, civil engineering (all areas where CERN has provided technical advice as part of the LCC collaboration); and
- other areas of common interest (e.g.: positron production and beam-dynamics) and/or information exchange related to common challenges (e.g.: costing methodology and power reduction studies).

APPENDIX 24

to

The Agreement on Collaborative Work (ICA-JP-0103)

between

**THE HIGH-ENERGY ACCELERATOR RESEARCH
ORGANIZATION (KEK)**

and

**THE EUROPEAN ORGANIZATION
FOR NUCLEAR RESEARCH (CERN)**

concerning

**The work of the ILC International Development Team to facilitate
the transition into the "Pre-Lab Phase"**

2020

Next



- Next European meeting:
 - Wednesday 9.12 10:00-12:00
 - Wednesday 13.1 10:00-12:00.
- Please forward emails to relevant colleagues and also ask them to sign up for the mailing list ilceurope-general@desy.de if they are interested to participate in future meetings.
- This can be done with a simple email to sympa@desy.de from the mail address you want to register, with the subject line SUBSCRIBE ilceurope-general [firstname lastname]
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- Contact Thomas (thomas.schoerner@desy.de) or myself concerning WEB pages or email