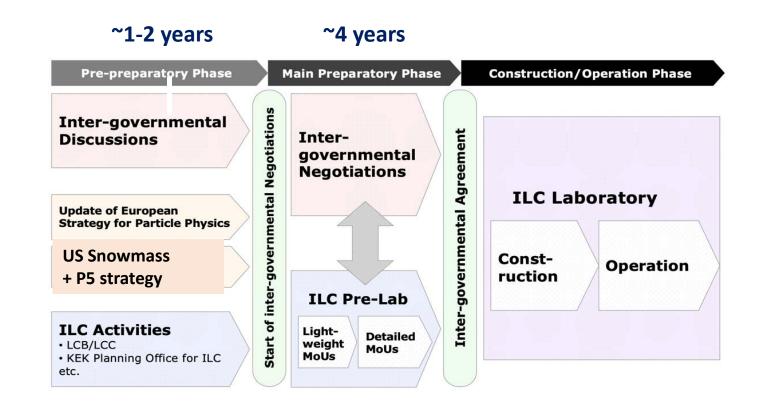
Meeting FC du CPPM, 29 Septembre 2020 Claude Vallée

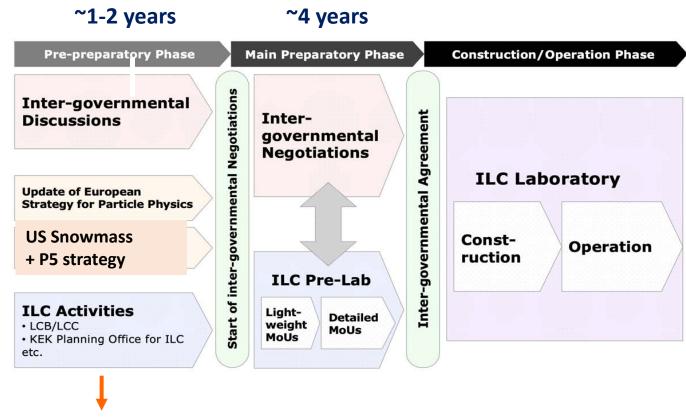
DERNIERES NOUVELLES DE L'ILC

ICFA ILC-IDT
Japan news
US news
EU news and CERN implication

MAIN RECENT DEVELOPMENTS



MAIN RECENT DEVELOPMENTS



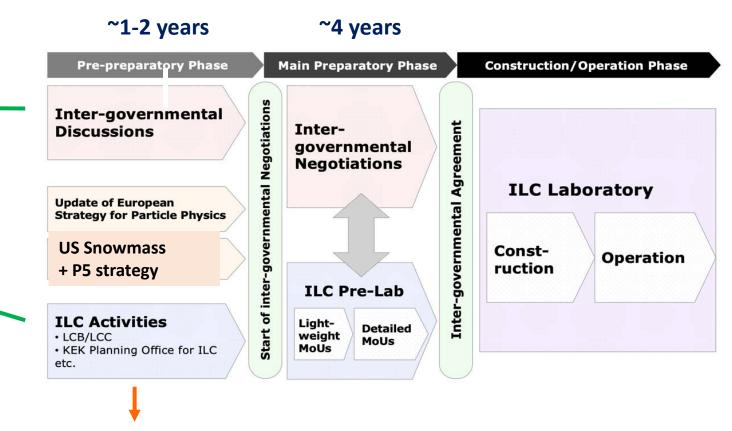
"International Development Team" (post-LCB/LCC structure) set up by ICFA and KEK, with the main goal to define the future ILC Pre-Lab mandate and organization

Time scale: 2021-22

MAIN RECENT DEVELOPMENTS

US support to ILC confirmed by DOE at opening of Snowmass

ILC European community meetings being regularly organized through CERN



"International Development Team" (post-LCB/LCC structure) set up by ICFA and KEK, with the main goal to define the future ILC Pre-Lab mandate and organization

Time scale: 2021-22

ILC INTERNATIONAL DEVELOPMENT TEAM

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

T. Nakada

Working Group 2

Accelerator

S. Michizono

Working Group 3

Physics & Detectors

H. Murayama

Overall:

- Prepare a proposal for the organization and governance of the ILC Pre-Lab (2022-25)
 Prepare the work and deliverables of the ILC Pre-laboratory and workout a scenario for contributions with national and regional partners
- Understand what is needed to get the Pre-lab started (constraints and opportunities)
- Start of Pre-lab does not require full approval of the entire project

TENTATIVE ILC DETECTOR(S) TIMELINE BASED ON LHC HISTORY

LHC:

- Eol April 1992 (12 submission general and specialized), Lol October 1992 (reduced number), Technical Proposals December 1994 (further reduction), Approval early 1996
- First system TDR end 1996 (done system by system over the next years) see pile on the right
- Requested, evaluated by LHCC set up by CERN (responsibility of the Research Director)
- New cavern excavations started after (e.g. ATLAS 1998 and handed over five years later)
- LHC overall was approved December 1994 (but in the pipeline, with positive slope, since end 1991)

ILC (initial IDT thoughts for discussion)

- Eol mid-end 2022, Lol end 2023 (for reduced set?), Technical Proposal (or overall TDR) end 2025 for final set of experiments
- Requested and evaluated by "ILCC" initially set up by the Prelab management, final approval however by ILC-laboratory
- Need "convergence towards approval" during Prelab, such that sufficient resources can be engaged at acceptable risk by the stakeholders



PHYSICS&DETECTOR OPEN QUESTIONS SUBMITTED TO SNOWMASS

for ILC detector design finalization

ILC Study Questions for Snowmass 2021

LCC PHYSICS WORKING GROUP

Keisuke Fujii¹, Christophe Grojean^{2,3}, Michael E. Peskin⁴ (Conveners); Tim Barklow⁴, Yuanning Gao⁵, Shinya Kanemura⁶, Jenny List², Mihoko Nojiri^{1,7}, Maxim Perelstein⁸, Roman Pöschl⁹, Jürgen Reuter², Frank Simon¹⁰, Tomohiko Tanabe¹, James D. Wells¹¹ (Physics WG); Mikael Berggren², Esteban Fullana¹², Juan Fuster¹², Frank Gaede², Daniel Jeans¹, Adrián Irles⁹, Sunghoon Jung¹³, Shin-Ichi Kawada², Shigeki Matsumoto⁷, Chris Potter¹⁴, Jan Strube^{14,15}
Taikan Suehara¹⁶, Junping Tian¹⁷, Marcel Vos¹³, Graham Wilson¹⁸, Hitoshi Yamamoto¹⁹, Ryo Yonamine¹⁹, Aleksander Filip Żarnecki²⁰ (Contributors); James Brau¹⁵, Hitoshi Murayama^{7,21,22} (ex officio)

rXiv:2007.03650v2

ILD guest membership set up to allow temporary studies of ILC related matters using the ILD full software machinery

(contact the ILD spokesman <u>ties.behnke@desy.de</u> for application)

JAPAN ACTIONS

https://www.iwate-pu.ac.jp/research/ilc/tipdc_top.html

ホーム > 研究関連情報 > 東北 | L C 事業推進センターの設立について

東北ILC事業推進センターの設立について

令和2年8月6日、ホテルサンルートー関(岩手県一関市)において東北ILC事業推進センター設立総会が開催され、規約を承認するとともに役員の選任を行いました。

また、設立総会に引き続き、第1回総会が開催され、令和2年度事業計画及び予算が承認されました。 第1回総会後、「ILCを取り巻く現況について」と題して、センターの代表に選任された鈴木岩手県立大学長が講演 を行いました。





→ Tohoku upgraded its ILC promotion organization on Aug.6.
Tohoku ILC planning office → Tohoku ILC project development center

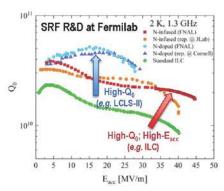
KEK news released to explain why KEK withdrew ILC from MEXT roadmap: ILC is now an inter-ministerial project similar to ITER and ISS, i.e. exceeding MEXT scope

US ACTIONS

From Jim Siegrist's slides on Aug.24 during the DOE-HEP PI meeting

U.S. Efforts Towards the International Linear Collider

- ▶U.S. supports the development and realization of a future Higgs Factory with international participation, taking into consideration the 2014 P5 strategy
- ▶2014 P5 recommendation: "Motivated by the strong scientific importance of the ILC and the recent initiative in Japan to host it, the U.S. should engage in modest and appropriate levels of ILC accelerator and detector design in areas where the U.S. can contribute critical expertise. Consider higher levels of collaboration if the ILC proceeds."



- Current support from the U.S. to enable Japan move forward with the ILC
- ▶ U.S. R&D efforts focused in cost-reduction for accelerator superconducting radiofrequency (SRF) cavities and modest ILC detector R&D
- ▶ To strengthen the long-standing U.S.-Japan cooperation in science and technology, concerted effort during last 12-15 months by the U.S. Government DOE, U.S. State Department, The White House Office of Science & Technology Policy, and the National Security Council to support a Japanese initiative to move forward to the proposed ILC "Pre-Laboratory" phase of the project
- ▶ DOE supports the recent ICFA-formed ILC International Development Team and its efforts towards making the timely realization of the ILC "Pre-Laboratory" phase possible

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US political support to ILC confirmed by DOE in its pre-Snowmass meeting

EU ACTIONS

EU-ILC Community regular meetings convened by Steinar Stapnes (IDT EU representative): Latest meeting on Sept. 17th: https://agenda.linearcollider.org/event/8651/

ILC EU community mailing list created: ilceurope-general@desy.de

Subscription procedure:

email to sympa@desy.de, with the subject line SUBSCRIBE ilceurope-general [firstname lastname] If you want to un subscribe use UNSUBSCRIBE ilceurope-general

European tools (mailing lists, web site, etc...) convened by Steinar Stapnes (<u>Steinar.Stapnes@cern.ch</u>) and Thomas Schoerner-Sadenius (<u>thomas.schoerner@desy.de</u>)

CERN MID-TERM PLAN 2021-25

~6 MCHF/year devoted to Linear Colliders activities CLIC/ILC balance to evolve according to international developments CERN-KEK MoU being set up for ILC-oriented activities

Excerpt of ILC-related MTP statements:

International Linear Collider (ILC) studies are supported through combined working groups (beam-dynamics, positrons, etc.) and co-operation with KEK for specific technology developments and ATF2. The future of the ILC focused part of linear collider activities will depend on the progress of the ILC project in Japan, primarily exploiting the commonalities between CLIC and ILC, common R&D studies between CERN and KEK, and European capabilities related to ILC technologies, inside and outside CERN.

The ILC organisation is currently being re-organised and CERN participates in the planning process for next phase. After a 12-18 month transition period 2020-21 the goal is that firmer plans for 2022 and beyond can be established concerning the future of the ILC project itself, and the European role in the project.

2021 Target: Planning for European activities within ILC; in particular participate in defining the project's preparation phase activities, in case of further positive statements from Japan about hosting the project.

Future prospects: provide support and coordination as requested for a potential European involvement in the ILC project in Japan.

CERN contribution: Contribute to the ILC design and preparation, including European coordination.

COMING DATES

(along Steinar Stapnes)

- The Americas LCWS is announced for 19-22 October 2020 (https://conf.slac.stanford.edu/awlc2020/). Its focus will be on pre-lab activities and also on the US planning, given the Snowmass process in progress.
- It is not yet clear when the next LCWS will take place in 2021 but it is possible that it will be in Europe (but most likely all remote).
- We also suggest to introduce a monthly information meeting. For the next months, we would like to suggest three dates:
 - Wednesday 4.11 10:00-12:00, Wednesday 9.12 10:00-12:00, Wednesday 13.1 10:00-12:00. Typical agenda: European WG1, 2, 3 members to report about WG activities, as well as national updates (as "fixed" agenda points), plus topical/current issues and discussions.