

ILD General Meeting ILD strategy III

Ties Behnke, April 5, 2022



Agenda

- Report from ILD, report from ICFA meeting
- Report from IA meeting
- Status and plans from FCAL collaboration

Ties Behnke
Daniel Jeans
Wolfgang Lohmann

ICFA mandate and a statement for the IDT

- Clarifying the function and organisation of the ILC Pre-Lab based on the KEK International Working Group report,
- **Developing a common understanding for the condition to start the ILC Pre-Lab,**
- Providing an international framework for the ILC accelerator effort and coordinating further R&D and engineering design work for the ILC in order to sustain the community effort and to guarantee a smooth transition to the ILC Pre-Lab phase,
- Providing an international framework for the ILC physics and detector activities and coordinating physics and detector R&D effort in order to sustain the community effort and guarantee a smooth transition to the ILC Pre-Lab phase,
- Discussing with international partners (e.g. universities, national and regional laboratories) for resources needed for the ILC Pre-Lab, and
- Providing necessary information to the national authorities to support their discussion of the establishment of the ILC Pre-Lab.

The Team has commenced its work and is expected to complete its mandate by the end of 2021.

T. Nakada, 2

MEXT report

During this reconsideration, for the ILC Project, rather than sticking to the ILC Preparatory Laboratory proposed this time, the hosting issue, which has a direct impact on the discussion of international cost sharing, should be temporarily decoupled. Taking the latest technological trends into consideration, the research organizations of the countries concerned should work out the technical issues that will be strategically important for development of next-generation accelerators through reinforced collaboration while properly sharing the roles, seek an approach that can be steadily implemented, and develop R&D step by step, reflecting various circumstances.

In order to achieve such a huge project, it is important to foster an environment in which the government officials of the countries concerned can discuss while going through the appropriate procedures within each country and sharing their respective circumstances, referring to the past consensus-building process in large international collaboration projects, such as the ITER Project.

https://www.mext.go.jp/content/20220401-mxt_kiso-000020463_9.pdf

MEXT report

It is also important for the community of researchers to build steady efforts for maintaining trust among the people involved and deepening mutual understanding through two-way communication in order to expand support by various stakeholders in Japan and overseas, sharing the understanding of the original objectives of the project and its ripple effects.

As for building a relationship with stakeholders, we look forward to future activities of ILC Japan, which was newly established last year. Once again, we hope that the global community of particle physics and accelerator science will undertake realistic considerations for future development, while involving young researchers who will be pioneers for the future.

https://www.mext.go.jp/content/20220401-mxt_kiso-000020463_9.pdf

ILC Pre-lab was **not established by the end of 2021** and IDT analysis of the situation

Difficult to start the Pre-lab soon: a clear mismatch between MEXT views and “our” views.

- MEXT thinks that approval of the Pre-lab can only be made **once the prospect for foreign contributions to the ILC is clarified**. MEXT has concerns that once the Pre-lab is established, or even by expressing an interest to host, it would be very difficult for the Japanese government not to construct the ILC even if insufficient foreign contributions were realised through intergovernmental negotiation.
- We think that the Pre-lab is **a step required by the cost and responsibility sharing discussion and for project approval**. In this preparatory phase, Pre-lab activities and intergovernmental negotiations proceed in parallel. Our view is that only after the successful outcome of the intergovernmental negotiation, could the ILC Laboratory be formed and the construction begun.

To proceed towards the Pre-lab, **this mismatch needs to be resolved**, which will require some time. On the other hand, the community wishes **a timely realisation of the ILC**.

The IDT recommendations:

ICFA **should continue its support** for the Japanese community effort to host the ILC in Japan in the present form, **only if**:

1. there is **a new prospect** to move towards the Pre-lab with a minimum delay,
⇒ **regular interaction** between MEXT and potential foreign partner governments for developing a common understanding for the path towards the ILC;
2. some of the time-critical Pre-lab **work packages can be started soon**, such that the delay in the ILC project would be minimized,
⇒ **a substantial increase in the MEXT budget** to KEK for ILC R&D that would allow some of the accelerator work packages to start as a collaborative effort between KEK and other interested laboratories

The recommendations by the MEXT Panel are **compatible but not strong enough** to give confidence that both of above will happen. **Further information from Japan would be required at the ICFA meeting** for the decision to continue.

In case if the ICFA decides to extend the support,

Possible milestones

- by the end of 2022,
 - a significant increase of the ILC R&D budget in Japan, which starts no later than the beginning of the Japanese Fiscal Year 2023 (April), and
 - progress in discussion among MEXT and international government authorities,
- by the end of 2023,
 - a decision by KEK to start the Japanese process for establishing the Pre-lab, and
 - sufficient progress in the interlaboratory discussion for the Pre-lab start-up,

with the following mandates (with new elements compared to the IDT's)

- coordinate the effort to establish the collaborative R&D work between KEK and other laboratories and to follow progress,
- provide the necessary support for the intergovernmental discussions,
- continue preparations for the Pre-lab start-up along the framework described in the Pre-lab proposal, taking into account feedback from the interested parties, and
- provide an international framework to support the ILC physics and detector activities,

with the IDT by adjusting the mandate or a new organisation

Result of the ICFA meeting

IFCA decided to extend its support for the ILC and endorsed the ITD proposal as the base.

Although there is some work to be done for the final statement and document concerning the new mandate and milestones by ICFA, they agree that the IDT should now start working for this new phase.

ILD reaction to the Russian invasion into Ukraine

1. Statement by ILD ET on the invasion on the 26.2.2022
2. Due to a decision by the DESY management and the German ministry, we had to suspend all services organized through DESY and extended to Russian Institutions, as part of the sanctions against Russia
 1. Removal from mailing lists hosted by DESY
 2. Suspension of access to DESY services/ accounts etc
3. Discussion in the IA on a suspension of Russian Institutes on ILD participation
 1. Majority voted in favour (see report by Daniel later today)
 2. Suspension acted on as of March 29, 2022

The Context

- DESY and Germany require all German science to suspend cooperation with Russian Institutes
- This is directed towards institutes, not individuals
- Germany will honor international agreements

- CERN – as an example how international organisations deal with this – has not yet decided on a global suspension
 - No new cooperations
 - Publications are currently suspended, until a clear regulation can be found

How shall ILD act?

- Suspend membership in ILD for Russian institutes
 - Offer individuals to remain individual (Guest) members in ILD
- ILD can not be represented by members from Russian Institutes in Conferences or workshops
- ILD publications with Russian authors:
 - Suspend publications for the moment
 - Need a sustainable solution:
 - Most likely: follow a regulation as discussed for CERN:
 - Publications already finished and based on pre-24-2022 work will continue
 - Later publications will be done with a author list without Russian authors
 - Approval phrase adopted to acknowledge Russian participation
- Any final regulations will be need approval by IA

ILD Strategy discussion

Today: Forward calorimetry (FCAL)

Strategy group meeting on Wednesday, 6.4.2022, 13:00 hours

Future meetings:

19.4.2022, 14:00 hours: Focus on tracking

Strategy group meeting on Wednesday, 20.4.2022, 13:00 hours

03.05.2022, 14:00 hour: Focus on Calorimetry (to be confirmed)

Strategy group meeting on Wednesday, 4.5.2022, 13:00 hours