

Opening Comments

2021/10/20

Keisuke Fujii

WG Objectives

- The discovery of the 125 GeV Higgs boson at LHC has vaulted the question of its properties on the top of the list of questions in HEP. **The 125GeV boson is a window to BSM physics and ILC is an ideal machine to use it.**

So far no “definite” signs of additional new particles or new phenomena have been reported, suggesting that there seem to be no easily discoverable new particles. This situation enhanced the importance of the precision measurements of H125 and loophole-less searches at ILC more than ever. There can be a zoo of new uncolored particles or new phenomena in the blind spots of LHC but can be discovered and studied in detail at ILC. We also need to further investigate what the ILC’s precision will imply in terms of BSM physics searches and identifications.

We need to demonstrate that ILC will advance our understanding of particle physics **qualitatively** beyond the information that will be available from the results expected from various experiments but the time of the first collision at the ILC. We hence need to **closely monitor, analyze, and examine developments of LHC and other experiments.**

- **With the strong support from the U.S. and favorable mention of ILC in a draft European Particle Physics Strategy Update 2020, LCB/ICFA met on Feb. 20, 2020 at SLAC together with a MEXT representative and a key diet member from Japan, and made a statement outlining the timeline towards ILC realization including International Development Team (IDT) hosted at KEK. IDT was established on Aug.2, 2020. After 10 months of hard work the IDT completed its Pre-lab proposal and submitted it to MEXT on June 2, 2021, which is to be evaluated by MEXT.**

We need to show that there is a strong community supporting ILC so as to encourage decision makers to decide favorably about the Pre-Lab startup. We need to show strong presence in the Snowmass process. The next target for us to show our activities is the Fall WS on Oct. 26 to 29, 2021 at KEK.

Updates in Japan

highlighted by KF

- MEXT will meet representatives from Germany, France, UK, and US on Oct 15
- Japan formed a new cabinet
 - Finance Minister Shunichi Suzuki is No.2 of Federation of Diet members supporting ILC
 - Secretary General of LDP (ruling party) Akira Amari is also a Federation member
- New MEXT Advisory Panel meets Oct 14, 18
- Mainly reviews progress in the last 3 years
- Oct 14: Tatsuya will present pre-lab proposal, as well as Mori (general), HM (science), Shin (machine)
- We hope they will agree with the need for the preparatory phase (unlike to endorse pre-lab itself)

KF's Notes on the New Panel

ILC Advisory Panel (2021-7-29→2022-7-28: extensible if needed)

1. Shouken Miyama (chair) : Astronomy (theory)
2. Tomohiro Ichiji : Policy Innovation
3. Tatsuo Omachi : Civil Engineering
4. Sadanori Okamura : Astronomy
5. **Haruyo Koiso : Accelerator**
6. Michihisa Kyoto : JSPS
7. Noritaka Kumagai : Accelerator
8. Takahiro Shinyo : Diplomacy
9. Katsuo Tokushuku : HEP
10. **Wako Tojima: Journalist**
11. Takashi Nakano : NP
12. Shunsuke Mori : System Engineering, Ecology
13. Hiromi Yokoyama : Scientific Communication

No subcommittee formed this time

The panel seemed particularly interested in

1. International cost sharing
2. Understanding from general public and academia
3. Technological readiness

Aiming at finishing within CY2021 (after ~4 more meetings)

From Kiyotomo's slides shown yesterday at the ILD meeting

MEXT Advisory Panel meeting on Oct 14

- https://www.mext.go.jp/b_menu/shingi/chousa/shinkou/064/kaisai/211014.htm
- Presentations, followed by Q&A
 - T. Mori (former JAHEP/HEPC chair, ICFA member) Project overview and its history
 - H. Murayama (IDT-WG3 chair), Science
 - S. Michizono (IDT-WG2 chair), Technical feasibility and validity of cost estimation (accelerator)
 - T. Nakada (IDT chair), Pre-lab proposal
- The meeting was limited to two hours.
 - The meeting had not enough time for discussions.

From Kiyotomo's slides shown yesterday at the ILD meeting

MEXT Advisory Panel meeting on Oct 18

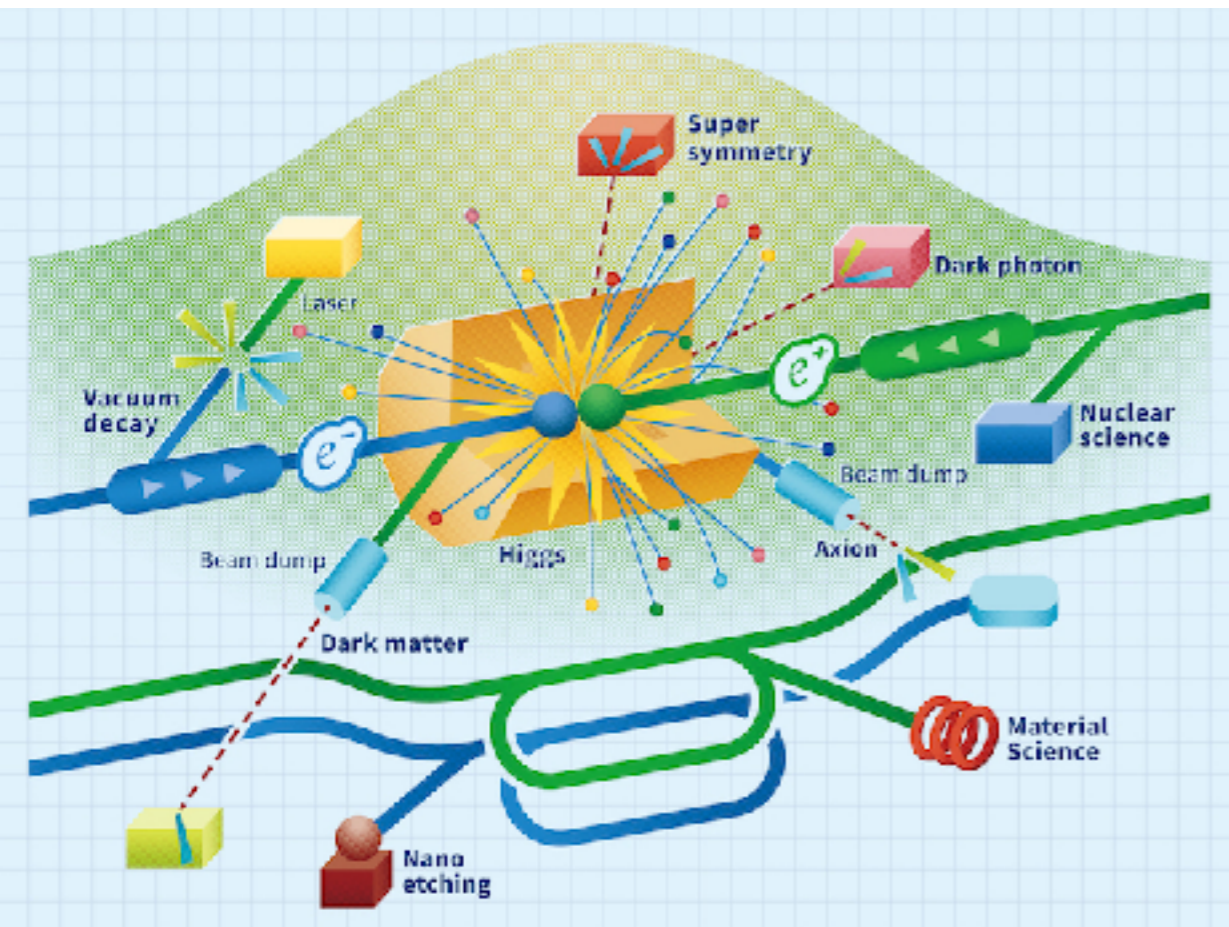
- https://www.mext.go.jp/b_menu/shingi/chousa/shinkou/064/kaisai/211018.htm
- Presentations, followed by Q&A
 - N. Terunuma (IDT-WG2) Technical feasibility and validity of cost estimation (civil-engineering, safety, environment)
 - S. Asai (ILC-Japan, JAHEP/HEPC chair), Academic significance and understanding of the public and scientific communities
 - M. Yamauchi (KEK DG), Prospects of international cooperation and cost sharing
 - Y. Okada (IDT-WG1), Prospects of developing and securing human resources and others
- The meeting time was extended from 2.0 to 2.5 hours for discussion among panel members.

ILCX2021 ILC Workshop on Potential Experiments

ILC Workshop on Potential Experiments (ILCX2021)

26–29 Oct 2021
Fully online
Japan timezone

Enter your search term



Do you have a new topic or idea for a potential experiment using ILC facilities?? Please submit your idea via "Registration" page.

Registration and abstract submission still virtually open!

2nd circular sent out

Our Group's Activities

Today

10:30

→ 10:50

Opening Remarks

Speaker: Keisuke Fujii

10:50

→ 11:10

Study of photon-associated Higgs production at the ILC

Speaker: Yumi Aoki (SOKENDAI,KEK)

11:10

→ 11:30

Tau reconstruction in $e^+e^- \rightarrow \tau^+\tau^-$ at the ILC250

Speaker: Keita Yumino (SOKENDAI)

11:30

→ 11:50

Precise measurement of Left-Right Asymmetry using $e^+e^- \rightarrow \gamma Z$ process at the ILC

Speaker: Takahiro Mizuno (Sokendai)

11:50

→ 12:50

lunch

12:50

→ 13:10

RHN analysis

Speaker: Jurina Nakajima (SOKENDAI/KEK)

13:10

→ 13:30

Search of Higgs decaying to exotic scalars using kinematic fit

Speaker: Yu Kato (University of Tokyo)

13:30

→ 14:00

Discussions

Short Term Schedule

- Weekly Meeting
 - Every Fri. at 14:30 (conf. ID: to be announced)
- General Meeting
 - 10:30 on **Wed. Dec .15, 2021?** (or on Saturday?)
- **ILC WS on Potential Exp., October 26-29, 2021 (Tsukuba)**
- **Snowmass Summer Study: July, 2022 (Seattle)**