

# Report from Physics Coordinators

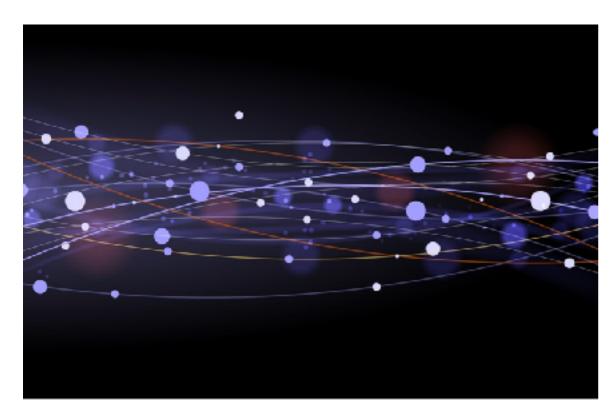
Keisuke Fujii on behalf of the Physics WG Nov 4, 2020

# ILC Situation in Japan

## **Current Status**

- Because of COVID19, it is not an appropriate time to bing up a big scientific project like ILC.
- However, the political environment about ILC is now very good, thanks, in particular, to strong US support. New PM, Mr. Suga, very well-informed of ILC. MEXT minister, Mr. Hagiuda stays in his position. A new deputy-MEXT minister, Ms. Takahashi, responsible for S&T policy from Iwate. Multiple discussion sessions since last time, more scheduled.
  - → Remaining hurdle: how to secure financial resource outside the ordinary S&T budge.
- The climate change: The first stage of the ILC is 250 GeV but, now studies on energy upgrade even above 1 TeV is encouraged.
- In spite of COIVD19, KEK is operating in the new normal mode, and various ILC promotion activities are on-going. Various strategy discussions are on going in KEK and JAHEP (Future HEP Project Committee). Note: 1st complete draft of KEK RM is out for comments from JAHEP. Its English translation being prepared. Final version after international review, maybe in April.
- The International Development Team took over LCC/LCB:
  - → IDT Membership is open to public since Sep.11.
  - → Preparation on-going for JFY2022 budget request next summer to establish Pre-Lab
- Tohoku upgraded its ILC promotion organization on Aug.6.
  - → Now actively promoting ILC.

#### What will a big global project look like after coronavirus?



## By Satoru Yamashita and Toshinori Mori

#### Key Takeaways

The world's particle physics communities have been working together to build a large scientific facility in Japan. The facility, called the International Linear Collider (ILC), will produce a large number of elementary particles. The research will lead to fundamental understanding of how the Universe began and is evolving into the future.

It has taken many years for scientists around the world to achieve a consensus on this global project and develop the necessary forefront technologies, which also have applications to transform various aspects of human society.

Steps toward the realisation of this project are in sight, as governments, including Japan and the U.S., have expressed their interest in discussing how the project should be realised through global collaboration. The ILC can become a truly global center of scientific collaboration that realises "Science for Peace" beyond countries, races, and religions.

https://nextrendsasia.org/what-will-a-big-global-project-look-like-after-coronavirus/

# ILD's Inputs to Snowmass

- LOI presentations -

Nov. 6 EF04: <a href="https://indico.fnal.gov/event/45735/">https://indico.fnal.gov/event/45735/</a>

- Takahiro on A<sub>LR</sub> using radiative return to Z
- Keita on di-tau production
- Taikan on 2-fermion production
- Graham on precision EW measurements

# ILD Physics WG Activities

- Joint Effort with Software WG and IDT WG3 -

Today (Nov. 4)

- → Probing heavy neutral leptons at the e+e- collider by Arindam Das
- → Validation of new flavor sample by Ryo
- → Update on stau searches by Teresa
- → Vertex finder with Deep Learning by Kiichi Goto

### Proposed S&A meeting schedule

Nov. 4: Daniel

Nov. 18: Frank

Dec. 2: Jenny

Dec. 16: KF

Biweekly S&A meeting on Wednesday at 14:00 CERN time.

Physics conveners' meeting every two weeks on Wednesday at 14:00 CERN time interleaved with S&A meetings.

#### **Conveners' ML:**

ild-physics-conveners@desy.de

Use this mailing list to send your talk request.

Stay healthy!