

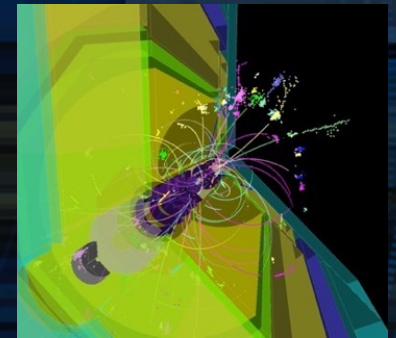
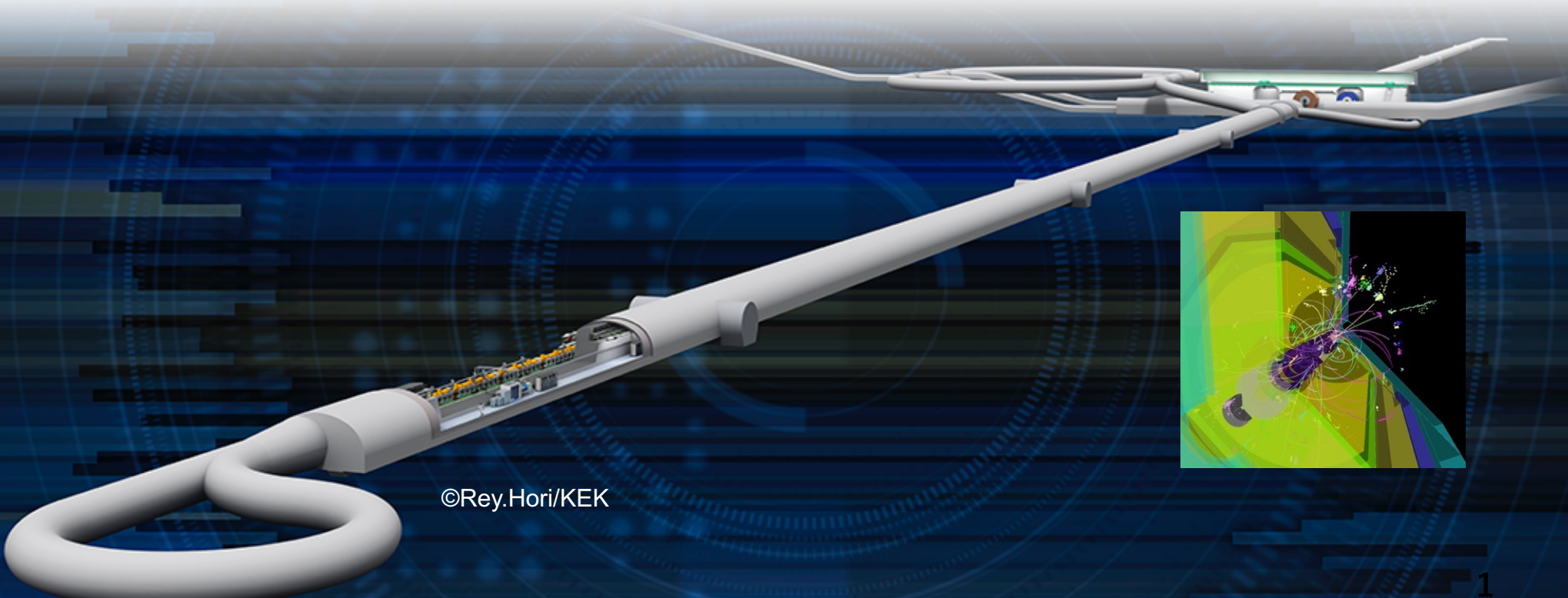
OPENING ADDRESS

ILC Summer Camp 2021 (online)

2021.09.21

K. Kawagoe

Kyushu University

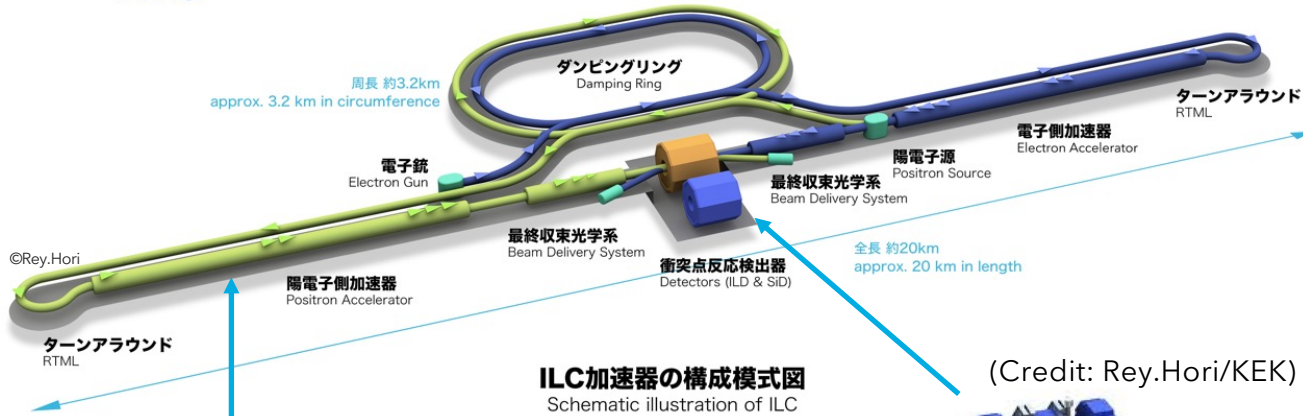


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International Linear Collider



e^+e^- linear collider



©Rey.Hori

(Credit: Rey.Hori/KEK)

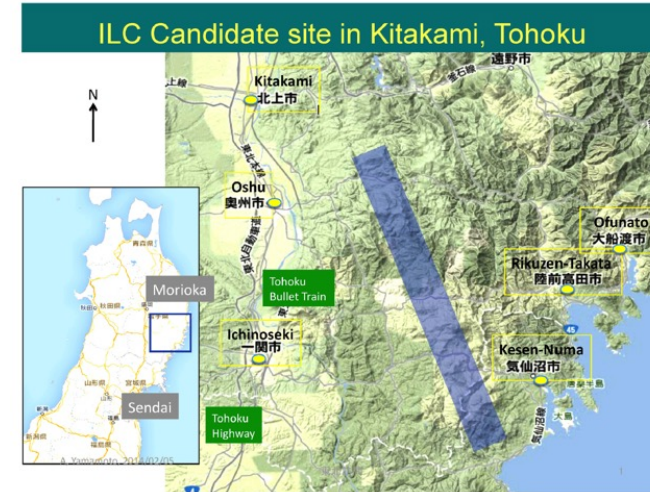


(Credit: Rey.Hori/KEK)



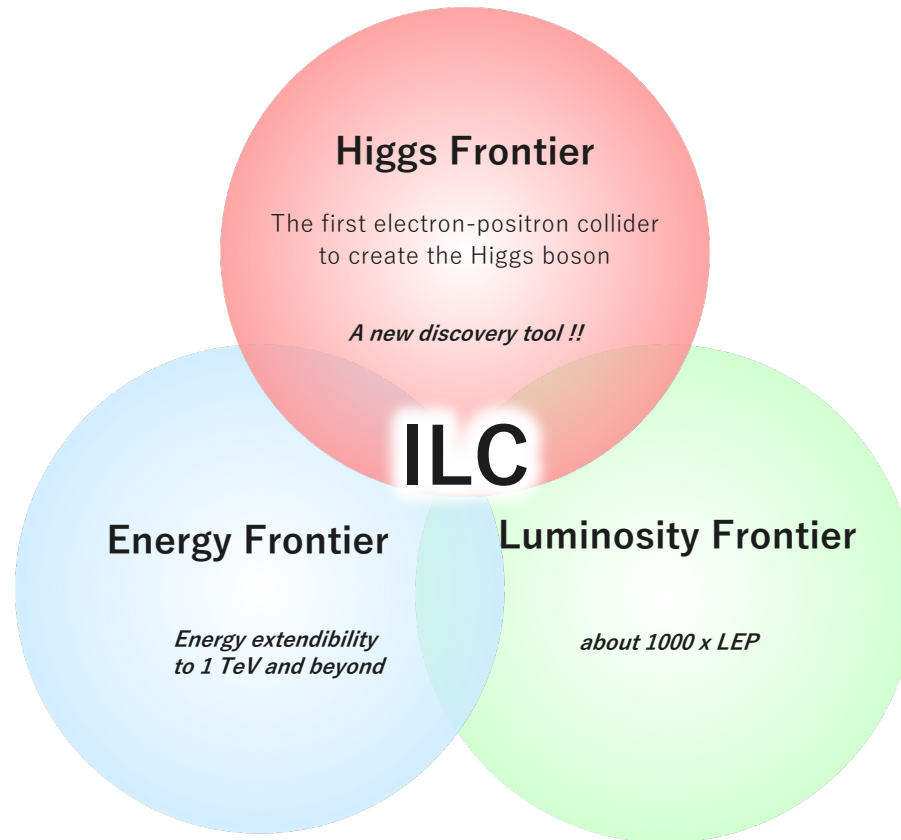
State-of-the-art Detector
Currently two proposals: SiD, ILD

Candidate Site:
Tohoku (Northeast), Japan



21km underground tunnel
Superconducting RF acceleration technology:
Accelerating gradient 31.5 MV/m

ILC : a machine of 3 frontiers

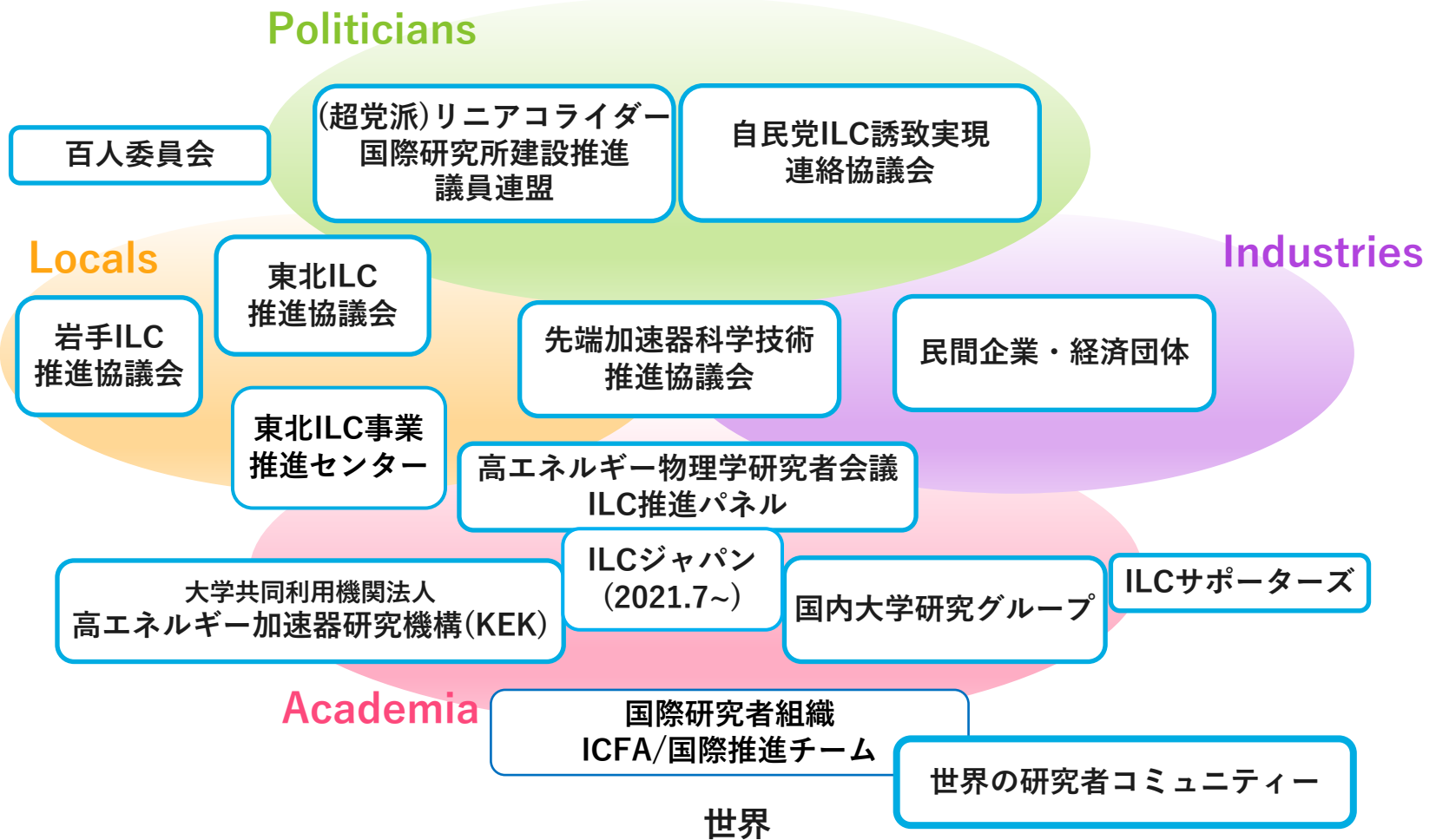


Challenges of Accelerator, Physics and Detectors

(taken from S. Stapnes, LCWS2021)



ILC promotion bodies in Japan (as of 2021 July)





ILC summer camps



- 2010 Kamasaki-onsen, Miyagi (??), hosted by KEK
- 2011 Shiga-kogen, Nagano (67), hosted by Shinshu-U
- 2012 Takeo, Saga (??), hosted by Saga-U ← **Higgs Discovery 2012**
- 2013 Toyama, Toyama (108), hosted by Toyama-U ← **ILC TDR 2013**
- 2014 Sekigane-onsen, Tottori (102), hosted by Hiroshima-U 
- 2015 Shiga-kogen, Nagano (76), hosted by UT-ICEPP
- 2016 Ichinoseki, Iwate (64), hosted by Iwate-U 
- 2017 Norikura-kogen, Nagano (58), hosted by Shinshu-U ← **ILC250 2017**
- 2018 Kudamatsu, Yamaguchi (74), hosted by Hiroshima-U
- 2019 Itako, Ibaraki (55), hosted by KEK 
- 2020 **Online** (178), hosted by Osaka-U 
- 2021 **Online** (142 or more), hosted by Kyushu-U ← **ILC IDT 2020**
← **ILC Prelab 2022 ???**

– Numbers in () are those of registered participants

Lectures

- **Lectures on theory**

- Overview: Mayumi Aoki (Kanazawa-U)
- Higgs: Ryo Nagai (Osaka-U)
- WIMP: Tomohiro Abe (Tokyo U of Science)
- Physics with very light new particles: Wen Yin (Tohoku-U)

- **Lectures on experiment**

- Physics overview: Wataru Ootani (UT-ICEPP)
- Detector overview: Shin-ichi Kawada (KEK)
- Vertex detector: Yosuke Takubo (KEK)
- Central tracker: Jurina Nakajima (Sokendai)
- Calorimeter: Naoki Tsuji (UT-ICEPP)

- **Lectures on accelerator**

- Overview: Masao Kuriki (Hiroshima-U)
- SCRF accelerator: Ryo Katayama (KEK)
- Injector: Masafumi Fukuda (KEK)
- Final focus: Masakazu Kurata (KEK)
- ILC facility: Yu Morikawa (KEK)

Talks

- **Invited non-ILC talks**

- New physics interpretation of the muon $g-2$ anomaly: T. Kitahara (Nagoya)
- Quantum computing: K. Terashi (ICEPP)
- The status of the Belle II experiment: K. Yoshihara (Nagoya-U)
- The LUXE experiment: Beate Heinemann (DESY)

- **Strategical talks**

- Physics opportunities at the ILC: Hitoshi Murayama (U Berkeley)
- ILC project status: Satoru Yamashita (UT-ICEPP)
- ILC-Japan: Shoji Asai (UT-ICEPP)
- IPNS director's view on ILC: Naohito Saito (KEK)
- Activities in Tohoku: Tomoyuki Sanuki (Tohoku-U)
- Preparation for MEXT advisory panel: Kiyotomo Kawagoe (Kyushu-U)
- European viewpoint: Tatsuya Nakada (EPFL)

Short talks

- Thank you very much for submitting many interesting abstracts !!
 - 22 theoretical talks
 - 12 experimental talks
 - 3 accelerator talks

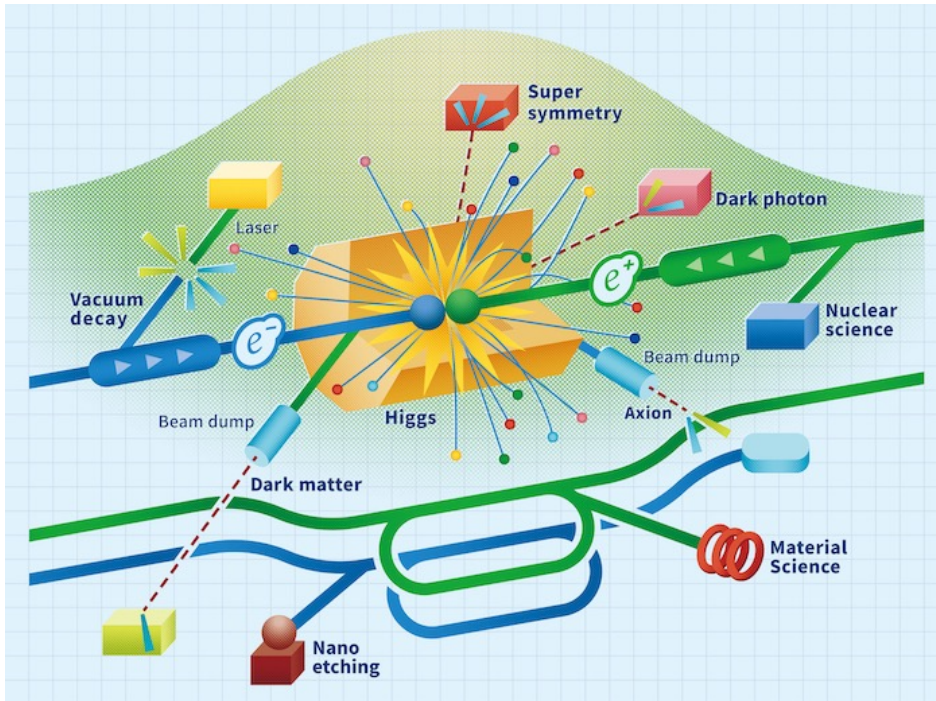
Student award: Outstanding presentations

- Newly established from this summer camp
- Judged by Organizing Committee members
- The number of award winners is assumed to be 5
- Winners will be awarded a certificate and a prize.

ILCX 2021

ILC workshop on Potential Experiments

- October 26-29, 2021, fully online
- Website: <https://agenda.linearcollider.org/event/9211/>
- Registration and abstract submission are now open
- Deadline of abstract submission: September 25



Some remarks

- Schedule is very tight
 - Please keep the allocated time.
 - Leave a few minutes for discussion.
- We asked you to prepare the slides in English.
 - However, either Japanese or English may be used for oral presentation.
 - Please upload your slides to indico before your talk.
 - If you cannot, please send us:
 - ilc-summer-camp21@epp.phys.kyushu-u.ac.jp
- **Online party on Wednesday**
 - ZOOM breakout rooms or Spatial.Chat
 - Details will be explained by Taikan

Enjoy the summer camp !!

