

OPENING

Annual ILC detector meeting

2017.03.30

K. Kawagoe (Kyushu)

ILC detector meetings

- 2016.06.18 Kickoff meeting
<https://kds.kek.jp/indico/event/21623/>
- 2016.09.29 Second meeting
<https://kds.kek.jp/indico/event/22152/>
- 2016.11.25 Third meeting (preparation for Morioka LCWS)
<https://kds.kek.jp/indico/event/22834/>
- 2017.03.30-31 Annual meeting
<https://agenda.linearcollider.org/event/7489/>
- Future meetings
 - 2017 June 16 : Meeting before ALCW@SLAC

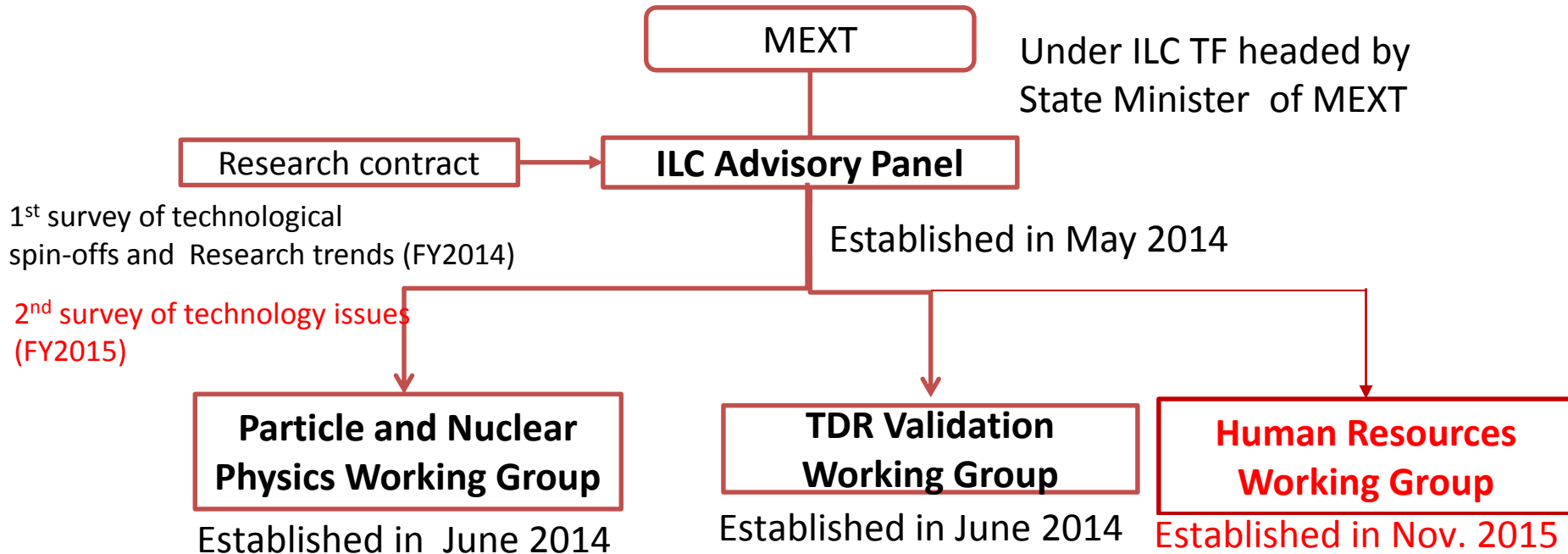
Conferences/workshops/meetings

- ILD Software and Technical Meeting @ Lyon in France, April 24-28.
<https://agenda.linearcollider.org/event/7520/>
- ALCW @ SLAC in the USA, June 26-30.
 - An omnibus form regional workshop, like ECFALC2016
- EPS-HEP @ Venice in Italy, 5-12 July.
- Lepton-Photon @ Guangzhou, China, 7-12 August.
- LCWS 2017 @Strasbourg, France, October 23-27.

agenda

- Status and prospects of collider experiments
 - LHC (HL-LHC): Accelerator and experiments
 - SuperKEKB and Belle II
 - ILC: accelerator and experiments
 - CEPC and FCCee (tomorrow)
- Toward “Green signal” of the ILC
 - MEXT ILC panel
 - ILC staging scenario and US-Japan SCRF R&D
 - Results of LHC 2017 Run
 - ➔ 2017-2018: critically important
- Talks on Physics and detectors at the ILC

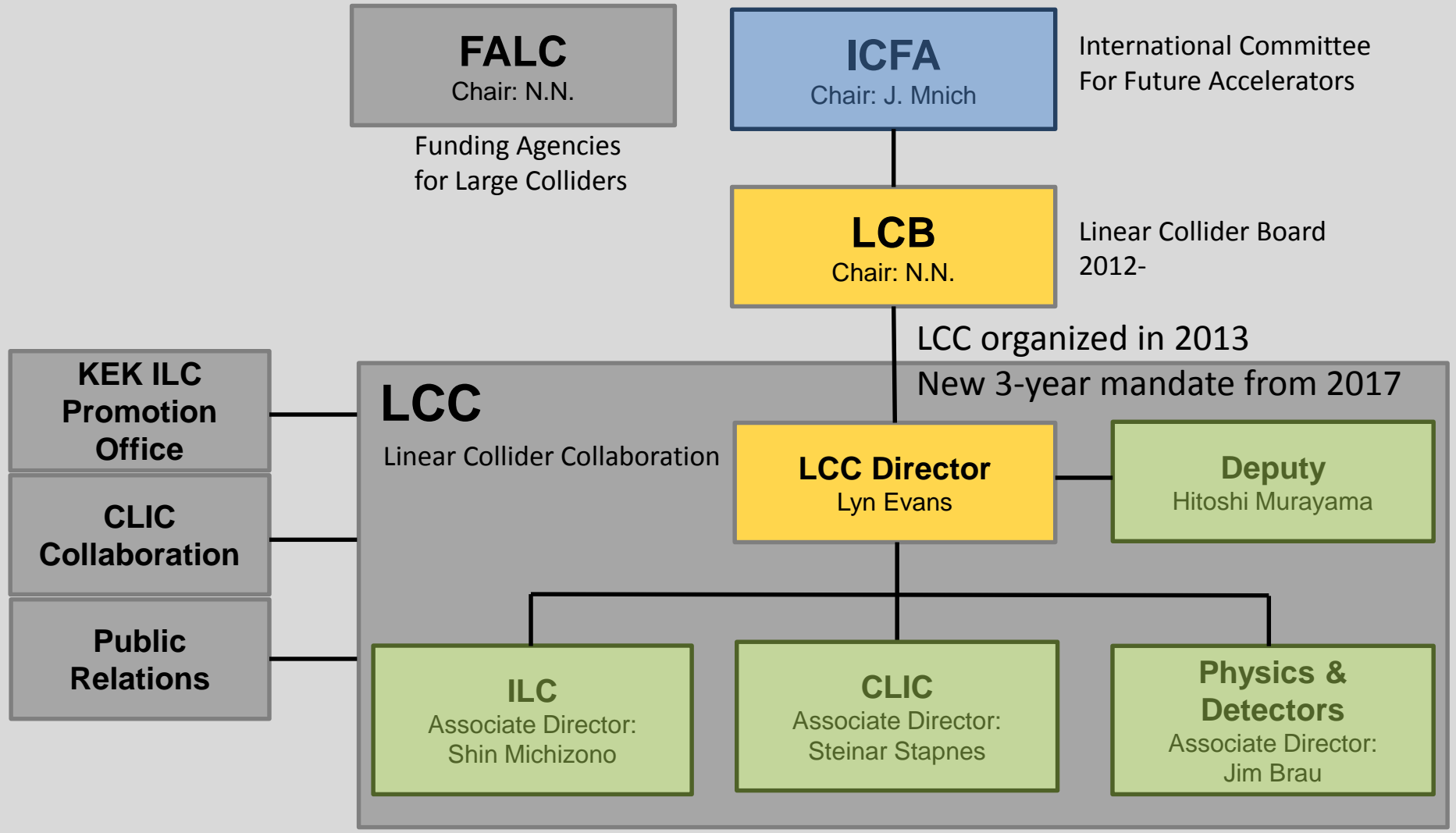
ILC Advisory Panel in MEXT



- Based on SCJ's recommendations, Special Committee investigates critical issues required to judge hosting ILC.
- ILC Advisory Panel's Summary (Aug 2015)
- "Report on measures to secure and develop human resources for the ILC" (July 2016)
- A new WG to investigate organizational and management issues was recently set up (Feb 2017)

→ More in Okada-san's talk

LCB/LCC Organization 2017



→ More in Komamiya-san's talk

Funding status

- A proposal of Grant-in-aid “Scientific Research in Innovative Area” was submitted to MEXT.
 - “Belle II + ILC + THEORY”, Prof. Aihara (U-Tokyo) as PI,
 1. Heavy quark physics (M. Nakao, KEK)
 2. Tau physics (H. Aihara, Tokyo)
 3. Higgs physics (K. Kawagoe, Kyushu)
 4. Dark sector (H. Yamamoto, Tohoku)
 5. Hadron physics and QCD (T. Nakano, Osaka)
 6. Application of detector technologies to Nuclear Medicine (T. Takahashi, JAXA)
 - Survived documentary elimination !!
 - Interview will take place in May, result in June
 - If successful, we can use the funding from July.
- US-Japan collaboration on HEP: Two applications for the ILC physics and detectors were submitted:
 - H. Yamamoto (Tohoku) and M. Breidenbach (SLAC): Sensor Development for Future e^+e^- Colliders
 - A. Miyamoto (KEK) and J. Strube (PNNL): Further development of ILC detector optimization and physics studies
 - Interview took place in March, in US and Japan individually.
 - Results will be disclosed after the US-Japan joint meeting on 19-20 April at BNL.

Backup slides

Grant-in-Aid for Scientific Research

- What we currently have are:
 - Scientific Research (A), S. Komamiya (Tokyo), FY2015-2019, “New development of ILC physics and calorimeter R&D”
 - Scientific Research (A), H. Yamamoto (Tohoku), FY2016-2020, “New development of top physics at electron-positron colliders”
 - Scientific Research (A), S. Matsumoto (IPMU), FY2016-2019, “Dark matter search at future electron-positron collider experiments”
 - Scientific Research (B), Y. Sugimoto (KEK), FY2016-2018, “Realization of two-phase CO₂ cooling system applicable for state-of-the-art detectors”
- A proposal of “Scientific Research in Innovative Area” was submitted to MEXT.
 - “Belle II + ILC + THEORY”, Prof. Aihara (U-Tokyo) as PI,
 1. Heavy quark physics (M. Nakao, KEK)
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 - **Survived documentary elimination !!**
 - Interview in May, result in June
 - If successful, we can use the funding from July.
- Other new applications
 - Results in next week (April); Let’s cross fingers !!

Research exchange programs

- JSPS Bilateral programs
 - **Japan-Germany**: W. Ootani (Tokyo), FY2016-2017, R&D of finely-segmented scintillator calorimeter with new-generation photon sensors
 - Japan-Spain: H. Yamamoto (Tohoku), submitted for FY2017-2018, Top quark physics at energy-frontier colliders → **Failed**
- **TYL/FJPPL** (France-Japan Particle Physics Laboratory)
 - Several programs ongoing related with ILC physics and detectors
- JSPS Core-to-Core program (multi-lateral)
 - Japan-Germany, France, Spain, US: K. Kawagoe (Kyushu), submitted for FY2017-2020, An international research hub for next-generation electron-positron collider experiments → **Failed** after interview. **We will try this again.**

US-Japan collaboration on High Energy Physics



- A new system:
 - For 30 years, only Japanese side (KEK and JSPS) have offered funding.
 - KEK provides 3.X Oku-JPY for research expense
 - From FY2017, US will prepare matching funds
 - Total amount of 2M USD for US-Japan Joint call.
- Common application documents were submitted to KEK and DOE: They were reviewed and individually in Japan and in US.
- Two applications for the ILC physics and detectors
 - H. Yamamoto (Tohoku) and M. Breidenbach (SLAC): Sensor Development for Future e^+e^- Colliders
 - A. Miyamoto (KEK) and J. Strube (PNNL): Further development of ILC detector optimization and physics studies
- Results will be disclosed after the US-Japan joint meeting on 19-20 April at BNL.

Status in Europe



- Funding in Europe (European Committee)
 - HORIZON 2020: The EU Framework Programme for Research and Innovation.
<https://ec.europa.eu/programmes/horizon2020/>
 - AIDA2020: 2015-2018, Advanced European Infrastructure for Detectors at Accelerators. <http://aida2020.web.cern.ch>
 - RISE (Research and Innovation Staff Exchange):
http://ec.europa.eu/research/mariecurieactions/about-msca/actions/rise/index_en.htm
 - E-JADE (Europe-Japan Accelerator Development Exchange Programme) is a RISE program, 2015-2018, research exchange (Europe to Japan) originally only for accelerator R&D, extended to cover detector R&Ds. <https://www.e-jade.eu>
 - RANDALF (Research and Development for A Future Lepton Facility): 2017-2020, a RISE proposal for research exchange (Europe to Japan & US) for physics and detectors at a future lepton collider failed. We will apply for the funding next year again for the funding that follows E-JADE.