

Roundtable at the 13th Pisa Meeting on Advanced Detectors May 26, 2015, Yasuhiro Okada (Executive Director, KEK)

(KEK)



Inter-University Research Institute Organization

- KEK is Inter-University Research Institute Organization, first established in 1971 as National Laboratory for High Energy Physics
- An International Center of Accelerator Science
- Cover wide range of scientific fields

KEK Roadmap 2013

http://legacy.kek.jp/Roadmap/index-en.html

- 1. Preamble
- 2. Long-Term Prospects and KEK's Role for Each Research Area
- 3. Strategy for Next Five Years (2014-2018)
 - 3.1 J-PARC Joint Project with JAEA (Neutrino, Hadron, Neutron, and Muon)
 - 3.2 SuperKEKB/Belle II Commissioning starts early 2016 3.3 LHC/ATLAS Preparation for the upgrade
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 - **3.4 ILC** Proposed to the Japanese Gov. to host the ILC in Japan
 - 3.5 Photon Science (Synchrotron Radiation Research)
 - 3.6 New Development of Accelerator and Detector Technologies
- 4. Summary

Cooperation in related scientific fields. (CMB, KAGRA,...) Industrial and medical application.(BNCT, Digital accelerator, ...) Advanced accelerator technologies.(Laser-driven accelerator, ...)

Broad area of accelerator based science covered by KEK





International Linear Collider (ILC)

- The next generation e+e- collider (500GeV, upgradable to 1TeV)
- Design work and accelerator R&D have been carried out in a global framework. The ILC TDR was completed by GDE in 2013, and ICFA set up LCC for the engineering design phase
- Hosting ILC has been proposed to Japanese government. Special Committee on ILC set up by MEXT in May 2104 investigates critical issues required to judge hosting ILC or not by 2016.
- KEK will continue accelerator R&D program at ATF, STF and CFF facilities collaborating with the international team, provide the ILC committees with appropriate information to help their timely conclusion, and develop a KEK's evolution plan to prepare for green light given by MEXT.



Next generation LBL experiment



 ICRR (Univ Tokyo) and IPNS (KEK) signed MoU of the cooperation in the Hyper-Kamiokande project in January 2015 to help the collaboration to prepare the proposal.

International Cooperation/Collaboration of KEK

- Accelerator facilities are open for users worldwide.
- KEK hosts international collaboration experiments like Belle II, T2K, KOTO, and COMET.
- KEK intends to take leadership in realizing a global project, ILC.

KEK helps education of young students and researchers and

developments of research cooperation especially in the Asia and

 Lab to lab, and nation to nation cooperation CERN-KEK (LHC, HL-LHC, CLIC, ILC, etc.)
US-Japan Cooperation in HEP (1979-)
FJPPL/TYL by IN2P3-IRFU-KEK (2006-)

Partner in EU programs (Horizon 2020), etc.



KEK and CERN established mutual offices in November 2014

Asia-Europe-Pacific School of High-Energy Physics

Oceanian regions.



Oct 2012 Fukuoka



AFAD 2015 (Asian Forum for Detectors and Accelerators)

Jan. 2015 Taiwan