

# HEP in ACFA

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# ACFA

Extract from: “Document of Asian Committee for Future Accelerators”, April 8, 1996, revised September 18, 2001

## *Purpose and Guideline*

The primary purpose of ACFA shall be to strengthen regional collaboration in accelerator-based science.

In particular, ACFA seeks cooperative ways

- to facilitate efficient utilization of existing human and material resources,
- to bring up scientists of the next generation, and
- to encourage future projects in Asia and to make recommendations for them to governments.

# ACFA

Extract of email 25 February, 2019, from Won Namkung, (ACFA founding member, Host for the founding ACFA meeting in 1996, 3rd ACFA Chair, 3rd APAC Chair, ALCSC Chair, ILCSC member, and 2016 IPAC Chair)

(1) ...(was one of) founding members in 1995 Beijing meeting, hosted 1<sup>st</sup> ACFA meeting in Pohang (1996)

ACFA is a body coordinating Asian countries on Accelerator-based sciences through working groups.

(eg. APAC, ALCSC, HPPA, ...)

(2) APAC successfully expanded to annual IPAC through MOU among Europe and Americas.

(3) ACFA supported the HEP Community, especially ILC through ALCSC in ILCSC since 2002.

(4) So, it is time to strengthen and promote the Asian Accelerator-Based Sciences more activities:

- Setting up more Working Groups like HPPA, for example Medical accelerators and Laser-driven accelerators
- Collaborating and coordinating with existing communities; Light Sources (Asia Oceania Forum for SR Research, ASOFSRR) and Nuclear Physics Association (ANPhA), and others.
- Encouraging countries in the Central Asia;

“In summary, we should discuss more constructive way of promoting Asian Accelerator-based Sciences.” Won Namkung, 2019

# HEP and ACFA

- There is No Intention to weaken ACFA.
- In fact, we want to strengthen ACFA.
- However, the original goal (2010) of Aihara-san, Nozaki, .. was to have an enhanced capacity to support future large HEP facilities in Asia.
  - Particle physicists are strongly motivated to push for large HEP facilities.

**“Asia-Oceania needs a forum to focus attention on future large HEP facilities”**

(especially the ILC and CEPC)

# AsiaHEP

- By ~2010:
  - The ILC had gained momentum as next “Big Collider”.
  - Discussion of CEPC had begun in China (proposed in 2012)
  - Asian economies were booming.
  - Push for Asia to take strong role internationally in HEP
- Hiroaki Aihara (Tokyo - 2010):
  - “... need to form Asia-Pacific Association of High Energy Physicists “  
→ *AsiaHEP as Strong Focus Group emerged*
- ACFA is broad umbrella organization for accelerator-based science
  - No Strong ACFA Focus to push Asian International leadership in HEP
  - ACFA is important forum for national accelerator-based science
  - HEP is inherently international: need strong regional support
  - Expect HEP activities to continue to contribute to ACFA goals

## So, ... What Has Changed Since 2010 to Require a Change?

- The international situation future high energy physics facilities is less clear.
- Although the European Strategy for Particle Physics Update of 2013 and 2020, the US P5 report (2013) still support the ILC in Japan, the advantage of timeliness has now reduced.
  - Japanese Government has not yet committed to Hosting the ILC.

However,

- The CERN HL-LHC upgrade has been delayed – operation from 2029
- A feasibility study of proposed CERN ~\$30B FCC (report due 2025) is causing uncertainty
- The US LBNF-Dune neutrino project will cost more than double original expectation

*In view of the uncertainties, we ask for Asian “step up” in HEP, via ACFA*

- ☐ Asia HEP community must become much more pro-active.
- ☐ Cannot expect broader accelerator-based science/technology community of the non-HEP ACFA membership to take a lead or even to focus on international HEP developments
- ☐ In ACFA, we (HEP) wish to strengthen the Asian accelerator community via all HEP projects

→ *Proposal for ACFA HEP-Subgroup, as part of ACFA with clear focus on major future HEP Facilities in Asia.*

# HEP-Subgroup in ACFA?

- AsiaHEP was formed in parallel with ACFA.
- However, ACFA and AsiaHEP remained locked into the same meeting schedule (causing repetition) and ambiguity between the two.
- The HEP community DOES NOT wish to dilute ACFA, as AsiaHEP might have been considered to have done.
- We wish to form a strong focus group to discuss strategies for the promotion of large future HEP facilities in Asia.
  - The 2019 proposal to have multiple focus groups with summary reports from group representatives at each ACFA meeting, was not acceptable to many ACFA members.
  - The HEP community does not wish to change ACFA operation for other groups.

By proposing a HEP-Subgroup within ACFA we will strengthen not weaken ACFA, whilst meeting the aims of the Asian HEP community.

(Note: Other areas of accelerator-based science may wish to create similar sub-groups in ACFA)

## Proposal for HEP Activity Sub-group to ACFA (preamble)

Major high energy particle physics laboratories, facilities and programs are already well developed in Asia.

However, with major new facilities under consideration a strong voice within the Asian region for these proposals is essential.

With the goal of strengthening the field, the following proposal is aimed at removing the duplication previously encountered between ACFA and AsiaHEP, whilst maintaining and enhancing a forum for the HEP community in Asia as a key part of ACFA.



# Proposal:

14/04/2023

Yasuhiro Okada and Geoffrey Taylor

1. That ACFA form a High Energy Physics (HEP) Subgroup, with members from the HEP community in Asia.
2. That the IHEP Director and KEK DG are invited as permanent members of the HEP Subgroup. A scientific secretary is appointed by the permanent members.
3. That membership in this Subgroup can include but not be limited to HEP community members in ACFA.
4. That the HEP Subgroup would include members of the Asian HEP community members so that each country across the Asia region active in HEP is represented.
5. That the HEP Subgroup secretary keeps a list of members and their contacts.
6. That HEP-active members of ACFA call HEP Subgroup meetings. Members or their delegates attend.
7. That a report from the HEP Subgroup would be a regular item of ACFA meeting agendas.
8. That a member of the HEP Subgroup or delegate is invited by the ACFA Chair to report meeting outcomes to a subsequent ACFA meeting. The scientific secretary may be asked to arrange the invitation.