

# Minutes for the 23<sup>rd</sup> ACFA and 6<sup>th</sup> AsiaHEP joint meeting

Meeting date: February 4, 2016

Meeting place: North 4 Building, 4F Meeting Room, Uji Campus, Kyoto University, Japan

Participants: Oleg Meshkov (BINP), In Soo Ko (PAL), Hyyong Suk, (GIST), Bum-Hoon Lee (Sogang U.), Dinakar Kanjilal (IUAC), Tripti Sekhar Datta (IUAC), Arup Bandyopadhyay (VECC), Yasuhiro Okada (KEK), Masanori Yamauchi (KEK), Akira Yamamoto (KEK), Shin-ichi Kurokawa (KEK; by video), Sachio Komamiya (KEK), Tomoaki Nakamura (KEK), Hitoshi Yamamoto (Tohoku U.), Hideaki Ohgaki (Kyoto U.), Yoshihisa Iwashita (Kyoto U.), Geoffrey Taylor (U. Melbourne), George Wei-Shu Hou (NTU), Hongwei Zhao (IMP), Yifang Wang (IHEP) , Jingyu Tang (IHEP), Zhengguo Zhao (USTC)

Hideaki Ohgaki welcomes attendees especially those from abroad. The attendees introduce themselves.

## **ACFA meeting (Chair: Yifang Wang, IHEP)**

1) Activities at Kyoto University: Yoshihisa Iwashita presents a general status report about accelerator-related activities at Kyoto University, which are distributed in three sectors: free-electron laser in Institute of Advance Energy, FFAG in KU Research Reactor Institute, and accelerators in Institute for Chemical Research.

2) Working Group reports:

- i. Advanced accelerators: Hyyong Suk presents the recent rapid development in laser-driven acceleration, and also the participation at AFAD2016 and organization of the summer school ASSS.
- ii. High-power proton accelerators (prepared by Kazuo Hasegawa and presented by Hongwei Zhao): It mainly summarizes the HPPA workshop which was held in Lanzhou in September 2015, organized by IMP.
- iii. Joint linear collider physics and detector: Hitoshi Yamamoto presents the overview of physics potentials for the ILC baseline and upgrade designs, and also the detector designs.
- iv. Network and computing: Tomoaki Nakamura presents the summary of the WG participation at AFAD2016, and also the overview of the fast-expanding network and computing on scientific research in the region.
- v. Cryogenics, cryomodule and superconductivity: Tripti Sekhar Datta presents the activities in the field in the region. We have seen very rapid development in the

region, especially in China where it is mainly driven by the ADS project, and to a lesser extent also in India. He recalled the proposal which was raised in the last ACFA meeting, to organize a summer school on Superconductivity & Cryogenics. The committee endorses the proposal and asks the working group conveners to contact the major labs for hosting.

### 3) Other status reports

- i. ILC technical status: Akira Yamamoto presents the overview of the ILC general technical features and recent developments since TDR, especially on SRF and nano-beam.
- ii. CEPC-SPPC technical status (prepared by Jie Gao, presented by Jingyu Tang): It overviews the general design aspects of the two colliders CEPC and SPPC, and identifies the key technologies which are selected for R&D efforts.
- iii. Neutron sources based on high power accelerator: Hongwei Zhao presents major activities on accelerator-based neutron sources in China, with special emphasis on China's ADS progress, which has made great progress in the low-energy front linac and now leads the world.

### 4) IPAC reports and ACFA prizes

- i. Report on the IPAC2016: In Soo Ko presents the organization status about the incoming IPAC16 which will take place in Busan on May 8-13, 2016. Everything has gone smoothly: the scientific program has been fixed; the local organization is at hand.
- ii. Modification of the rules of IPAC Asia with respect to the naming of the ACFA/IPAC Asia prizes: Shin-Ichi Kurokawa proposes some changes to the rules discussed in the last two ACFA meetings. The committee endorses the changes with some wording modification. Kurokawa will make the final documents based on the discussions.
- iii. Report from IPAC16 prize committee on awardees of the ACFA/IPAC16 prizes: Shin-Ichi Kurokawa presents the selection results by the committee, Xie Jialin Prizes goes to Derek Lowenstein of BNL, Nishikawa Tetsuji Prize goes to Gwo-Huei Luo of NSRRC, and Hogil Kim Prize goes to Sam Posen of Cornell University.

### 5) Diverse issues

Yifang Wang tells the committee about the IUPAP new commission for accelerator science. We have selected two representatives from Asia in the Interim Working Group on Accelerator Physics, Seiya Yamaguchi from KEK and Qing Qin from IHEP. But there is no further news.

About the next ACFA chair and vice chair: the present ACFA vice chair Geoffrey Taylor will become ACFA chair automatically for the next two-year term from January 2017 to

December 2018. The committee makes the decision that the next vice chair will come from Korea, and asks the Korean representatives to recommend one candidate before the next ACFA meeting.

About the membership of Iran: Yifang Wang shows a letter from Prof. Javad Rahighi of Iran who is also the Experimental Physics Chair of SESAME, which asks for a membership in ACFA. Some members mention that the same person claimed in other occasions that Iran joins the European science societies instead of Asian ones. The committee makes the decision that we welcome Iran to become a member of ACFA regardless its positions in other scientific associations, just like Russia can join both Asian and European associations. Yifang Wang will send a message to Prof. Rahighi and ask him to recommend a person who can represent Iran in ACFA, and the representative should show up at the next ACFA meeting for the formal acceptance to the membership.

About the next meeting venue and date: AFAD has selected Lanzhou and January 2017 as the venue and date for AFAD2017, and IMP as the host. The committee agrees to have the ACFA-AsiaHEP meeting together with AFAD2017, and prefers mid-January 2017 as the date.

#### **AsiaHEP meeting (Chair: George Wei-Shu Hou, NTU)**

1) FALC report: Yasuhiro Okada presents a report about recent FALC activities and decisions. Two meetings were held in 2015 and the next one is to be held at KEK in three weeks. The world-wide funding club is extending the coverage from ILC to new projects: FCC, CEPC and LBNF.

2) ICFA/LCB report: Sachio Komamiya presents a report about the ICFA activities concerning ILC, and also the recent actions by the Japanese MEXT.

3) ILC project promotion status: Yasuhiro Okada presents the recent promotion activities by ILC project team, as well as KEK and Japanese MEXT, especially on the international participation and communication with other Japanese science communities.

4) CEPC-SPPC promotion status: Jingyu Tang presents a report about the recent promotion activities on CEPC-SPPC in China, including forming project organization, study team, seeking both domestic and international participation, and applying for starting R&D budgets.

5) Discussion about how to strengthen the role of ACFA and AsiaHEP: George Wei-Shu Hou retrospects how AsiaHEP (& ACFA?) have been playing their roles in promoting the relevant activities. He also gives a statement draft for the AsiaHEP and ACFA committees about supporting both ILC and CEPC-SPPC in Asia. The committee endorses the making of the statement, and asks George Wei-Shu Hou to lead the wording effort.

**Decisions and action items:**

- 1) Approve the organization of the ACFA Asian School on Superconductivity & Cryogenics, the WG5 conveners will consult major labs for hosting.
- 2) Approve the modification of the rules of the IPAC Asia Prizes, and Shin-Ichi Kurokawa will make the final wording following the discussion.
- 3) The next joint ACFA-AsiaHEP meeting will be held in Lanzhou, preferable mid-January 2017, hosted by IMP, together with AFAD 2017.
- 4) The next ACFA vice-chair will come from Korea, the Korean representatives will recommend one candidate before the next ACFA meeting.
- 5) Welcome Iran to be a member of ACFA. Yifang Wang will send a message to Prof. Rahighi and ask him to recommend a person who can represent Iran in ACFA and should show up at the next ACFA meeting.
- 6) Endorse George Wei-Shu Hou to lead a draft group to work on a statement to support both ILC and CEPC-SPPC in Asia.

**Appendix: Agenda for the joint meeting of the 23<sup>rd</sup> ACFA and 6<sup>th</sup> AsiaHEP**

|                | Subject  | Speaker/host        |        |
|----------------|--|---------------------|--------|
| <b>ACFA</b>    | <b>Chair: Yifang Wang</b>  |                     |        |
| 9:00-9:10      | Opening address/member introduction  | Hideaki Ohgaki      |        |
| 9:10-9:30      | Activities at Kyoto University   | Yoshihisa Iwashita  |        |
| 9:30-9:45      | WG report: Advanced accelerator  | Hyyong Suk          |        |
| 9:45-10:00     | WG report: High-power proton accelerator (Prepared by K.Hasegawa)                              | Hongwei Zhao        |        |
| 10:00-10:15    | WG report: Join linear collider physics and detector   | Hitoshi Yamamoto    |        |
| 10:15-10:30    | WG report: Network and computing   | Tomoaki Nakamura    |        |
| 10:30-10:45    | WG report: Cryogenics, cryomodule and superconductivity  | Tripti Sekhar Datta |        |
| 10:45-11:15    | Coffee break /Group Photo  | Kenichi Yoshida     |        |
| 11:15-11:35    | ILC technical status   | Akira Yamamoto      |        |
| 11:35-11:45    | CEPC-SPPC technical status (prepared by Jie Gao)   | Jingyu Tang         |        |
| 11:45-12:05    | Neutron sources based on high power accelerator  | Hongwei Zhao        |        |
| 12:05-12:25    | Report on the IPAC2016   | In Soo Ko           |        |
| 12:25-13:30    | Lunch  | Kenichi Yoshida     |        |
| 13:30-13:45    | Modification of the rules of IPAC Asia with respect to the naming of the ACFA/IPAC Asia prizes | Shin-ichi Kurokawa  | Remote |
| 13:45-14:05    | Report from IPAC16 prize committee on awardees of the ACFA/IPAC16 prizes                       | Shin-ichi Kurokawa  | Remote |
| 14:05-14:20    | IUPAP new commission for accelerator science   | Yifang Wang         |        |
| 14:20-14:40    | Discussions (venue for next meeting, next vice chair, Iranian membership etc.)                 | Yifang Wang         |        |
| <b>AsiaHEP</b> | <b>Chair: George Wei-Shu Hou</b>   |                     |        |
| 14:40-15:00    | FALC report  | Yasuhiro Okada      |        |
| 15:00-15:20    | ICFA/LCB report  | Sachio Komamiya     |        |
| 15:20-15:40    | Coffee break   | Kenichi Yoshida     |        |
| 15:40-16:00    | ILC project promotion status   | Yasuhiro Okada      |        |
| 16:00-16:00    | CEPC-SPPC promotion status   | Jingyu Tang         |        |
| 16:20-16:40    | Discussion: how to strengthen the role of ACFA and AsiaHEP?                                    | George Wei-Shu Hou  |        |
| 17:00          | Meeting complete   | Yasuhiro Okada      |        |
|                |  |                     |        |
| 18:00-         | Dinner   | Kenichi Yoshida     |        |