

Minutes of the 3rd ACFA Plenary Meeting

The Third ACFA Plenary Meeting was held in Tsukuba, Japan, hosted by High Energy Accelerator Research Organization (KEK), on March 25th, 1998. The First Asian Particle Accelerator Conference was also held at KEK from 24 till 27 March, concurrently with this meeting.

Participants

Hiroataka Sugawara (Chairman)	Zhipeng Zheng (Vice-Chairman)
Setsuya Kawabata (Secretary)	Shuhong Wang (Deputy Secretary)
Stuart N. Tovey (U.Melbourne)	Claudio Tuniz (ANSTO/Australia)
Shouxian Fang (IHEP/Beijing)	Dingchang Xian (IHEP/China)
Tao Huang (IHEP/Beijing)	Jia-er Chen (Peking U.)
Bauwen Wei (IMP/Lanzhou)	Yuzheng Lim (Tsinghua U./Beijing)
Zuping Liu (NSRL/Hefei)	Hongjie Xu (SINR/ Shanghai)
S.S. Kapoor (BARC/India)	Som Nath Ganguli (TIFR/India)
A.S. Raja Rao (CAT/Indore)	G.K. Mehta (NSC/NewDelhi)
Azhar Djalois (BATAN/Jakarta)	Yorikiyo Nagashima (Osaka U./Osaka)
Motohiro Kihara (KEK/Tsukuba)	Shin-ichi Kurokawa (KEK/Tsukuba)
Won Namkung (PAL/Pohang)	Joo-Sang Kang (Korea U./Korea)
Moohyun Yoon (POSTECH/Pohang)	Swee-Ping Chia (U.Malaya/Malaysia)
Ian C. Hsu (TsingHua U./Taiwan)	Richard Sah (SRRC/Taiwan)
Weerapong Pairsuwan (NSRC/Thailand)	Takeo Ishii (NSRC/Thailand)
Tran Thanh Minh (INST/Hanoi)	Van Do Nguyen (Inst. Physics/Hanoi)

Program

1. Opening

- a. Welcome Address by H. Sugawara (KEK)
- b. New member and Introduction
- c. APAC98 by M. Kihara (KEK)

Current Status

- . Australia by S. Tovey (Univ. Melbourne)
 - a. BEPC/BES by Z. Zheng (IHEP)
 - b. Linear Collider by H. Sugawara (KEK)

Discussion

- . ACFA officers
 - a. Next ACFA meeting
 - b. Next APAC
 - c. LC Physics Study Group by H. Sugawara (KEK)

Round Table Discussion on the international collaboration

- a. Network by Y. Watase (KEK)
 - b. Electronic publication by Y. Chin (KEK)
 - c. Aspect of R&D and experiment by S. Wang (IHEP)
 - d. Social and political aspect by W. Namkung (PAL)
 - e. Discussion chaired by H. Sugawara (KEK)
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Summary

1. Opening

a. Welcome address

Prof. H. Sugawara, Director General of High Energy Accelerator Research Organization, welcomed all participants, reported the recent developments of accelerator-based science in Asia, and stressed the importance of the regional cooperation and collaboration.

b. New member and introduction

Australia region was welcomed newly to join in ACFA. Prof. S. Tovey participated in the meeting as an ACFA member.

There were 32 participants including 13 observers in the meeting, who introduced themselves before starting discussions.

c. APAC98

Prof. M. Kihara reported the status of APAC98 briefly, in which 345 scientists from 16 countries participated as below;

Australia	1	Germany	3	Korea	36	Taiwan	7
Canada	2	India	10	Malaysia	1	Thailand	2
China	32	Indonesia	2	Netherlands	1	USA	15
France	3	Japan	220	Russia	7	Vietnam	3

2. Current Status

Since almost all reports on the current status were presented in the APAC98 concurrently held at KEK, only the following reports were given at the meeting:

High Energy Physics Programs in Australia	S. Tovey
BEPC/BES Experiment	Z. Zheng
Linear Collider Project	H. Sugawara

In addition Prof. C. Tuniz (ANSTO) reported the Australian Synchrotron Radiation facility and the 20MW Reactor as a neutron source, approved last year.

Prof. A. Djalois proposed strongly that ACFA should consider the medical and industrial application seriously as well as High energy physics etc. The meeting re-confirmed the importance of these fields as written in the article 4b of the ACFA document.

3. Discussion

a. ACFA Officers

According to the article 4c of the ACFA document the Vice-Chairman Prof. Z. Zheng and Deputy Secretary Prof. S. Wang became respectively the Chairman and Secretary for the coming term. Prof. W. Namkung was elected as the Vice-Chairman and would nominate the Deputy Secretary and announce it to other members.

b. The next Plenary ACFA Meeting

The fourth Plenary ACFA Meeting was decided to be held in India in the next spring.

c. The next APAC

The next APAC was decided to be held in China, tentatively in 2001. Taking the schedule of PAC and EPAC into account the time of the conference will be altered.

d. Linear Collider Physics Study Group

Prof. S. Iwata, head of JLC promotion office, KEK, wrote a letter to ACFA chairman as in an Attachment, where he proposed to create a physics study group for the $e^+ e^-$

Linear Collider under ACFA. The meeting recognized the necessity and importance of such an accelerator not only for High Energy Physics as an energy frontier machine, but also for materials science as the next-generation, coherent X-ray source. ACFA decided to create the Physics Study Group and to ask Prof. S. Iwata to submit a report in two years.

4. Round Table Discussion on the international collaboration

An ad hoc session for the international collaboration in Asia was jointly held in APAC98, where the following four talks were made as the starting point of discussion:

a. Network connection in Asia	Y. Watase	KEK
b. Electronic publication	Y. Chin	KEK
c. Aspect of R&D and experiment	S. Wang	IHEP
d. Social and political aspect	W. Namkung	PAL

Although the network working group was created in 1996, the contact person from each region is not yet fixed. It is urgent to identify the contact persons, and to survey and report the current status.

In the second talk Prof. Chin proposed to publish the APAC proceedings by CD-ROM. As the result of discussion ACFA decided to create a working group of CD-ROM publication, which will help the APAC local organizer publish the proceedings technically.

Attachment

To ACFA Chairman

March 25, 1998

---- Physics Study Group for the $e^+ e^-$ Linear Collider ----

In the 2nd plenary meeting, ACFA announced its endorsement of the $e^+ e^-$ linear collider as one of the major future facilities in the Asia-Pacific region. In fact, recent world-wide research at existing facilities has enabled us to form a more and more concrete picture of "TeV-scale physics" and, consequently, has made more and more crucial the $e^+ e^-$ linear collider's role in its exploration. According to the recent picture, the linear collider is expected to produce very important, decisive physics outputs even in the initial stage (in the energy region below 500GeV) of its energy upgrading program; for instance, a top quark study at threshold, which is very important in its own right, can be a key to new physics and, more importantly, the Higgs particle will almost certainly manifest itself there or the SUSY/GUTS scenario will be disapproved.

In addition to its role as an energy frontier machine for High Energy Physics, the linear collider has a facet which can be shared with a new means for materials science. The ultra-low emittance beam essential to the linear collider is also an indispensable element of the next-generation, coherent x-ray source. In order to efficiently and effectively promote accelerator science in the region, one should start seriously thinking about the possibility of integrating both into a single project.

Turning our attention to activities in Asian region, we see significant progress in high energy and synchrotron radiation experiments at various domestic facilities. Not only that, many researchers from ACFA member nations are actively participating in large-scale experiments such as at LEP-II, Tevatron collider, HERA and PEP-II/KEKB.

The Asian physics community on which ACFA is based has grown significantly and has set a firm enough foundation to prepare for further advancement.

In response to the ACFA statement issued in the last year, considering the importance of the linear collider project and the potential of our community to realize it, we propose to set up a study group under ACFA. The charge of the group shall be to elucidate physics scenario and experimental feasibilities and to write up a report to ACFA within two years. Taking account of the scale of and the world-wide interests in such project, actual studies shall hopefully be carried out in a more global scope in spite of the regional nature of ACFA's initiative. KEK is willing to play a secretarial role in the study.

Seigi IWATA