

Minutes of the ANPhA board meeting 2016

Byungsik Hong and Tohru Motobayashi

- Time and Date: 13:30-16:00 Nov. 25, 2016
- Location: Aoba Science Hall, Tohoku University, Japan
- Attendance: Kevin Insik Hahn, Byungsik Hong, Dao Tien Khoa, Weiping Liu, Yu-Gang Ma, Dong-Pil Min (Chair), Tohru Motobayashi, Takaharu Otsuka, Hirokazu Tamura, Kazuhiro Tanaka, Anthony Thomas, Furong Xu, Gabriele-Elisabeth (Sissy) Koerner (NuPECC), Atsushi Hosaka (Observer), Shoji Nagamiya (Observer), Henry Tsz-king Wong (Observer)
- Absence: W.-C. Chang, A. Chakrabarti, V. Datar, G. Xiao, Mongolia

1. Adoption of the agenda

Adopted

2. Approval of minutes of previous meeting in Gyeongju City (Motobayashi)

Approved after modifying the last sentence of 6.A from "Min said it would be possible to exercise veto on any unwilling activities for us:" to "Min assured the Board that ANPhA would retain the right of independence."

3. Chairman's business

A. Election of the new Chair

- i. The new Chair will appoint the new Local Secretary.

Kazuhiro Tanaka was suggested by Nagamiya, proposed by Hahn, and seconded by Liu as a candidate.

The board members unanimously agreed to elect Tanaka as the next Chair, and Tanaka accepted.

Thomas proposed to appoint the Chair-elect as a Vice Chair in the next board meeting for continuity. The board members agreed to accept the proposal.

B. Approval of the change of the board members

- i. India: Dinesh Kumar Srivastava → Alok Chakrabarti (intrim director of VECC until August 2016)

- ii. Taiwan: Wen-Chen Chang → Henry Tsz-king Wong (Institute of Physics, Academia Sinica)
- iii. Korea: Dong-Pil Min → Myung-Ki Cheoun (Soongsil University) [Dong-Pil Min will be an observer.]
- iv. Japan: Kazuhiro Otsuka → Atsushi Hosaka (RCNP, Osaka University)

Approved.

C. Establishment of the Division of Nuclear Physics in AAPPS: Proposal in Appendix (Hong, Motobayashi)

- i. Submission of the proposal to AAPPS in December 14, 2015
- ii. Proposal approved in the AAPPS Council meeting in Beijing in January 22-23, 2016
- iii. Official approval letter received in January 27, 2016.
- iv. DNP worked together with the Session organizers (Cedric Simenel and Andrew Stuchbery) to choose the following 3 keynote speakers in APCC13+AIP in Brisbane:
 - 1. (Nuclear structure) Hiroyoshi Sakurai (The University of Tokyo, Japan) on "Magic numbers of unstable nuclei"
 - 2. (Nuclear reaction) Takashi Nakamura (TIT, Japan) on "Nuclear reaction studies on continuum of super neutron-rich nuclei"
 - 3. (Storage rings) Guoqing Xiao (Institute of Modern Physics, China)

Reported.

D. Misc.

- i. Exchange MOU between APCTP and AAPPS (Oct. 15, 2016)
 - 1. APCTP will strengthen the support for APCC and other academic activities.
 - 2. APCTP will collaborate with AAPPS editorial board to publish the AAPPS Bulletin.
 - 3. AAPPS will establish the administrative headquarters at the APCTP.

(Hong) ANPhA can apply the support from APCTP. (The application for financial support should be submitted during the application period via

[https://www.apctp.org/.](https://www.apctp.org/))

- ii. Some information (not reported in the board meeting, but added in the minutes for recording activities.)
 1. The Chair Min reported the activities of ANPhA at the WG9/C12 meeting that took place in Adelaide in September 11, 2016.
 2. Delegating the ANPhA Chair, Motobayashi attended the NuPECC meeting and reported on the activities of ANPhA in Vienna in October 7-8, 2016.

4. Reports from each member countries/region for nuclear physics activities and the latest information for facility projects

Skipped as we are done in the ANPhA Symposium. The details can be seen in the uploaded presentation files on the ANPhA website.

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5. Status of White Paper (Tanaka)

The information on the accelerator facilities for nuclear physics in Asia has been collected. But the data, including the ones Tanaka provided by himself for the facilities with no response, must be updated so that the MS-Word file will be sent out for any corrections.

In the future, critical analysis of the present data must be made and summarized in the front pages of the White Paper. That should provide basis for future planning of facilities.

In the handbook only accelerators performing nuclear physics research are listed. The underground facilities, the reactor-based facilities, and the application can be tabulated. (But whether they will be tabulated separately was not clearly concluded in the meeting.)

Tanaka plans to do following with the modification and agreement by ANPhA members:

- ① Ask our former Chairs and Nagamiya to read the current material and express their opinions on the Asian future.
- ② Edit them and add several pages before the data sheets of individual facilities, with site map, physics, energy and intensity summary etc.
- ③ Ask the ANPhA board members to check and approve those contents.
- ④ Publish them in the Web page and, also, in the printed version.

Koerner recommended to wrap up the current information and publish handbook (like NuPECC handbook) first as soon as possible.

6. (Discussion) Future direction of ANPhA (and DNP)
 - A. Possible steps toward LRP based on the Session on "Eight years of ANPhA"
Skipped as we discussed in the item 5 above.
7. ANPhA support symposia, workshops, schools for 2017-2018
 - A. (Khoa) ISPUN2017 to be held in Halong Bay, Vietnam, September 2017
 - B. (Hosaka) HNP (organized by Hiyama and Y. Oh, etc.) at RIKEN, December 2017
 - C. (Tamura) Strangeness Nuclear Physics Conference. Tamura asked an approval by email later when it is proposed.
8. Report from NuPECC
Skipped as it was done by Koerner during the Symposium.
9. Next meeting
Halong City (No separate Symposium)
Date: September 24th, 2017
Nagamiya suggested to invite Malaysians as Malaysia will host the next APPC.
10. AOB
 - A. Liu and Thomas agreed to serve as vice Chairs continuously.
 - B. Motobayashi agreed to serve as a secretary continuously.
11. Adjourned at 16:00

[Appendix]

Proposal for the Division of Nuclear Physics in AAPPS

1. Background

Nuclear physics is one of the fields that study the fundamental structure of matter and interactions among fundamental particles. During the past centuries, nuclear physics have revealed great details of the basic composite nature of hadrons, nuclei, and nuclear matter. The nuclear structure is turned out to be more complex than what we imagined and the fundamental forces are yet to be explored in strongly interacting matter.

In nuclear physics various kinds of accelerators are essential for forefront experiments, and more powerful computing resources are required for theoretical calculations. For the last decade or so, the large-scale accelerators for nuclear physics like RIKEN¹'s RIBF², J-PARC's hadron facilities, and IMP³'s HIRFL-CSR⁴ have been completed in Asia. They have attracted many users from all over the world and produced a lot of exciting results. In addition, the other accelerators like BRIF⁵, HIAF⁶ and Beijing-ISOL⁷ in China and RAON⁸ in Korea are being developed. On the other hand, several underground projects such as Stawell Underground Laboratory in Australia, CJPL/JUNA⁹ in China, (Super) Kamiokande in Japan, KIMS¹⁰ in Korea, and TEXONO¹¹ in Taiwan for dark matter search, double beta decays, low-energy (low cross-section) astrophysical reactions, neutrino detection, and

¹ Rikagaku Kenkyūsho

² Radioactive Ion Beam Factory

³ Institute of Modern Physics

⁴ Heavy-Ion Research Facility in Lanzhou-Cooling Storage Ring

⁵ Beijing Rare Ion Beam Facility

⁶ High-Intensity Accelerator Facility

⁷ Isotope Separator OnLine

⁸ Korean word meaning "delightful"

⁹ China JinPing underground Laboratory/Jinping Underground Laboratory for Nuclear Astrophysics

¹⁰ Korea Invisible Mass Search

¹¹ Taiwan EXperiments On Neutrino

more are in the various stages of development. As a result, the role of Asia has ever become more important in nuclear physics and, thus, closer cooperation among countries and regions in future planning and more effective usage of the existing facilities are demanded.

Under these circumstances the representatives from China, Japan, and Korea agreed to launch the central organization for nuclear physics in Asia. The representatives from the three countries held the first preparatory meeting in RIKEN's Tokyo office to establish the Asian Nuclear Physics Association (ANPhA) in October 4, 2008. (Here, the "representatives" do not necessarily mean that they were officially appointed by the member societies to which they belong.) After an additional preparatory meetings in Seoul and Beijing, the ANPhA was finally established in July, 2009 with the four initial membership countries including Vietnam. Currently, ANPhA consists of eight membership countries and regions: Australia, China, India, Japan, Korea, Mongolia, Taiwan, and Vietnam.

The main objectives of ANPhA can be summarized as following:

- i. The objective of ANPhA is to strengthen "Collaboration" among Asian nuclear research scientists through the promotion of nuclear physics and its transdisciplinary and applications.
- ii. The objective of ANPhA is also to promote "Education" in Asian nuclear science through mutual exchange and coordination.
- iii. ANPhA also aims at "Coordination" among Asian nuclear scientists by actively utilizing existing research facilities.
- iv. Furthermore, at a later stage, it will help to discuss future planning of nuclear science facilities and instrumentation in Asia.

Since its establishment, ANPhA have had total ten Board Meetings in conjunction mostly with either symposium or conference:

- i. 1st Meeting @ Peking University in Beijing in July 18, 2009 (a part of the 3rd

preparatory meeting)

- ii. 2nd Meeting @ J-PARC in Tokai in January 17, 2010 in conjunction with the 1st ANPhA symposium
- iii. 3rd Meeting @ Sungkyunkwan University in Seoul in October 2, 2010 in conjunction with the 2nd ANPhA symposium
- iv. 4th Meeting @ Institute of Modern Physics in Lanzhou in April 30, 2011 in conjunction with the 3rd ANPhA symposium
- v. 5th Meeting @ Institute for Nuclear Science and Technique in Hanoi in November 27, 2011 in conjunction with the International Symposium on Physics of Unstable Nuclei 2011 (ISPUN11)
- vi. 6th Meeting @ University of Adelaide in Adelaide in April 4, 2012 in conjunction with the 4th ANPhA Symposium
- vii. 7th Meeting @ National Taiwan University in Taipei in April 27, 2013 in conjunction with the 5th ANPhA Symposium
- viii. 8th Meeting @ Variable Energy Cyclotron Center in Kolkata in February 19, 2014 in conjunction with the 6th ANPhA Symposium
- ix. 9th Meeting @ New World Saigon Hotel in Ho Chi Minh City in November 7, 2014 in conjunction with International Symposium on Physics of Unstable Nuclei 2014 (ISPUN14)
- x. 10th Meeting @ Kyeongju City in October 23-24, 2015 in conjunction with fall meeting of the Korean Physical Society and the 7th ANPhA Symposium

In the last board meeting held in Gyeongju City, Korea in October 24, 2015, ANPhA has agreed that it is important to strengthen the cooperation between ANPhA and AAPPS and also that ANPhA can play the leading role of establishing the Nuclear Physics Division in AAPPS. Along with ANPhA, the Nuclear Physics Division of AAPPS plans to organize the nuclear physics session in Asia-Pacific Physics Conference (APPC) for every three years as well as the other meetings of AAPPS, if necessary.



Figure 1 Photograph of the 7th ANPhA Symposium held in Gyeongju City in Oct. 23, 2015.

2. Subjects of the division

- A. Nucleon-nucleon interaction, few-body systems
- B. Nuclear structure
- C. Nuclear reactions
- D. Relativistic nuclear collisions
- E. Hadronic physics and QCD
- F. Electroweak interaction, symmetries
- G. Nuclear astrophysics

3. Category of the division

Regular

4. Rules of the division

The rules of the division is attached in the end as Appendix.

5. Core members of the Division

A. Executive Committee (EXCO) from member countries and regions

i. **Australia**

Anthony Thomas, University of Adelaide anthony.thomas@adelaide.edu.au

ii. **China**

Furong Xu, Peking University frxu@pku.edu.cn

Weiping Liu, China Institute of Atomic Energy wpliu@ciae.ac.cn

Guoqing Xiao, Institute of Modern Physics xiaogq@impcas.ac.cn

Yugang Ma, Shanghai Institute of Applied Physics ygma@sinap.ac.cn

iii. **India**

Vivek Datar, Bhabha Atomic Research Center datar@barc.gov.in

Dinesh Kumar Srivastava, Variable Energy Cyclotron Center
dinesh@vecc.gov.in

iv. **Japan**

Kazuhiro Tanaka, High-Energy Accelerator Research Organization (KEK)
kazuhiro.tanaka@kek.jp

Tohru Motobayashi, RIKEN motobaya@riken.jp

Takaharu Otsuka, University of Tokyo otsuka@phys.s.u-tokyo.ac.jp

Hirokazu Tamura, Tohoku University tamura@lambda.phys.tohoku.ac.jp

v. **Korea**

Dong-Pil Min, Seoul National University dongpil.min@gmail.com

Kevin Insik Hahn, Ewha Womans University ishahn@ewha.ac.kr

Byungsik Hong, Korea University bhong@korea.ac.kr

vi. Mongolia

To be announced

vii. Taiwan

Wen-Chen Chang, Institute of Physics, Academia Sinica
changwc@phys.sinica.edu.tw

viii. Vietnam

Dao Tien Khoa, Institute for Nuclear Science & Technology (INST) Hanoi
khoa@vinatom.gov.vn

B. Advisory Committee

Shoji Nagamiya, RIKEN and KEK shoji.nagamiya@riken.jp

Hideyuki Sakai, RIKEN hsakai@ribf.riken.jp

Yanlin Ye, Peking University yeyl@pku.edu.cn

C. Founding EXCO Officers

i. Chair

Dong-Pil Min

Scientific Advisory Board Member to UN Secretary General

Professor Emeritus, Department of Physics and Astronomy,

Seoul National University, Seoul 151-747, Republic of Korea

(Email) dongpil.min@gmail.com

ii. Vice Chairs

Weiping Liu, China Institute of Atomic Energy

Tohru Motobayashi, RIKEN

Amthony Thomas, University of Adelaide

iii. Secretary

Byungsik Hong, Korea University

6. Web address of the division

It does not exist yet.

Ref.) ANPhA homepage: <http://ribf.riken.jp/anpha/index.html>