

# Report for JSPS Asian Science Seminar FY2008 <Summary>

Date December 26, 2008

1. Title of Seminar JSPS--CAS Asian Science Seminar:  
Frontier Science at High-Intensity Proton Accelerators

## 2. Purpose of Seminar

The seminar is planned primarily for Asian young scientists who have strong interest in science to be carried out at J-PARC (High intensity Proton accelerator under construction at Tokai, Japan, about 100 km northeast of Tokyo and 70 km north of Tokyo-Narita airport) and other high-intensity proton accelerators. J-PARC has already succeeded in accelerating 3 GeV protons from its rapid cycling synchrotron and proton protons were circulated in the 50 GeV ring. The first experiments are expected to start in 2008.

In the seminar, there will be lectures on science frontier to be explored at J-PARC such as Nuclear, Particle, Material & Life sciences as well as on the accelerator and experimental facilities. In addition, there will be workshop style sessions with presentation and discussion by young scientists together with leading scientists in the world from Japan, Asia and other countries.

## 3. Period

From October 19., 2008 through October 25, 2008 ( 7 days)

4. Venue China Center of Advanced Science and Technology (CCAST), CAS, Beijing, China

## 5. Organization

### (1) Cosponsors

Japan Side	Japan Society for the Promotion of Science
	Tohoku University
Chiana Side	Chinese Institute of Atomic Energy (CIAE)
	Institute of High Energy Physics (IHEP, CAS)

### (2) Organizer

#### 1) Japan side

Name in full Osamu Hashimoto

Affiliation and position Professor  
Department of Physics, School of Science,  
Tohoku University, Sendai 9808578

#### 2) China side

Name in full Zhao, Zhi-Xiang

Affiliation and position      President  
China Institute of Atomic Energy, President  
P.O. Box 275, Beijing 102413, PRC

Name in full                      Chen, Hesheng

Affiliation and position      Director general  
Institute of High Energy Physics, Director  
Chinese Academy of Science, P.O. Box 918  
Beijing 100039, PRC

6. Program: Agenda, topics, related activities (e.g., reception, excursion)

Attached

7. Lecturers and Participants

1) Number of Persons

	Lecturers	Participants	Total
Japan side	45	*38	*83
(Number who participated under program funding)	12	16	28
China side	30	**101	**131
(Number who participated under program funding)	0	0	0
Other persons	13	3	16
(Number who participated under program funding)	10	3	13
Total	88	142	230
(Number who participated under program funding)	22	19	41

2) List

A: Lecturers  
See attached file.

B: Participants  
See attached file.

8. Please describe the achievements of the seminar.

\*From scientific viewpoints

One of the purposes of the seminar is to investigate research plans at the J-PARC facility, which will start operation soon, through discussions between leading scientists and Asian young scientists. This purpose was well achieved. In particular, the research plans were investigated from an interdisciplinary viewpoint among different research fields and future prospects was discussed for the world- most complex accelerator facility, J-PARC, to bridge a wide variety of scientific fields. In addition, the scientific discussions through a whole week on accelerator science in Asia in at-home atmosphere satisfied the participants.

In the field of nuclear physics, the Hadron Hall and the 50 GeV ring will be employed. The participants made a further discussion to strengthen the collaborations between Asian countries, which have already been successfully carried out. In the field of strangeness nuclear physics, in particular, in which Japanese researchers are leading the world, Korean and Chinese scientists have strong interests in collaborative research and will start examining experimental plans on hypernuclear physics together. As for the experiment to search for kaon rare decays, which is planned to be performed at the Hadron Hall, a discussion took place to organize a collaborative research. In the field of neutrino

science, which is being actively explored at present, participants discussed issues on the neutrino oscillation experiment, T2K, at J-PARC and other neutrino experiments in Japan and in China, and they shared the future prospects of the field.

On the other hand, in the material and biological science fields at J-PARC, research will soon start at the three major laboratories including new-generation pulse neutron sources in Europe and US (SNS in US and ISIS second target station in UK) which will start operation almost at the same time. In particular, in the field of nano-science and new materials such as superconductor, thermoelectric material, hydrogen storage material, biological material, severe competition is expected in both basic and applied researches. Through the seminar, J-PARC was shown to be open to international research activities including those from neighboring Asian countries, and the participants recognized J-PARC as the most important accelerator facility for Asian countries. The seminar encourages Asian countries to propose research subjects and instrument as well as to promote personnel interchange for them.

In the field of neutron science, Japan-Korea and Japan-Taiwan workshops have been regularly held in these several years, interchange of researchers between Japan and China has been developed, and the Asia-Oceania neutron science forum including Australia has been discussed to be formed. In this seminar, a list of Chinese collaborators has been given to the Japan side and the scientists in both countries agreed in developing collaborative research in each subfield. The seminar was strongly supported by the participants from China, Korea and Taiwan as a timely opportunity to construct a system to realize joint researches. The directors and top-level executives of Chinese Academy of Science, Chinese Natural Science Foundation, China Institute of Atomic Energy, Institute of High Energy Physics, Institute of Modern Physics, Shanghai Synchrotron Radiation Facility, etc. attended the seminar together with the director of the J-PARC center and the president of KEK, which formed the foundation to strengthen joint researches in the fields of accelerator science.

\*From viewpoints of international exchange and education of young researcher

As one of the major accelerator facilities in Asia, J-PARC should be a facility attractive to Asian scientists. Since collaborative research with Asian scientists has been started in various fields and many proposals have been submitted by Asian scientists, it is expected that more and more young Asian scientists will join the research activities in J-PARC. In this situation, Japanese scientists who are playing important roles in J-PARC, including those in Tohoku University, gave presentations directly to Asian young scientists on the frontier science to be explored at J-PARC in the seminar, which provided an excellent opportunity to educate and encourage the young scientists who will play active roles in various researches at J-PARC.

In the seminar, many lectures were given across various fields by world-leading scientists, which were highly appreciated not only by young participants but also by lecturers. Among them, participants were deeply impressed by attendance and a lecture by Prof. T. D. Lee in Columbia University, who is a Nobel Prize winner and influential to Chinese scientific policies.

In the program of the seminar, the workshop sessions were arranged, in addition to the school-type lectures, in which high-quality presentations and active discussions concerning experiments ongoing or under preparation were made by graduate students and young researcher from Asian countries. The lectures and workshops covering broad scientific fields promoted close interaction and friendship between leading scientists and young researchers as well as between Japanese and Asian young researchers, which successfully formed a foundation for collaborative researches in future.

# **Scientific Program**

**Asia Science Seminar on  
Frontier Science at High-Intensity Proton  
Accelerators**

**October 19 - 25, 2008  
Beijing**

## October 19<sup>th</sup>, 2008 Sunday

8:25	Boarding in front of hotel
8:30	Leaving for the Seminar
(9:00--9:30)	<b>Opening address</b> (Chair: Meng Jie)
	<b>O. Hashimoto (Tohoku)</b> <b>H. Fukunishi (JSPS)</b> <b>Han Jianguo (NSFC)</b> <b>Chen Hesheng (IHEP)</b> <b>Zhao Zhixiang (CIAE)</b>
	## Overview ##
(9:30--10:10)	(Chair: S. Nagamiya) Frontier Science and J-PARC
	<b>T. D. Lee (Columbia / CCAST)</b>
(10:10--10:40)	Coffee + photo
(10:40--11:20)	(Chair: Y. Fujii) Overview of J-PARC
	<b>S. Nagamiya (J-PARC)</b>
(11:20--12:00)	NSFC and Frontier Science
	<b>Han Jianguo (NSFC)</b>
(12:00--13:30)	Lunch
	## Accelerators and Facilities ##
(13:30--14:10)	(Chair: Zhang Huanqiao) J-PARC Accelerator and Its Challenge
	<b>Y. Yamazaki (KEK)</b>
(14:10--14:40)	China Spallation Neutron Source: Overview and status
	<b>Wei Jie (CSNS)</b>
(14:40--15:10)	Coffee
(15:10--15:40)	(Chair: Y. Yamazaki) J-PARC and the Prospective Neutron Sciences
	<b>M. Arai (JAEA)</b>
(15:40--16:00)	The First Neutron Production at the J-PARC 1 MW Pulsed Spallation Neutron Source

**F. Maekawa (JAEA)**

(16:00--16:30)

Hadron Hall and Neutrino Facility

**K. H. Tanaka (KEK)**

(16:30--17:00)

J-PARC User Information

**M. Ieiri (KEK)**

18:00 Welcome Reception

Address: *No.8 south 3<sup>rd</sup> street Zhong Guan Cun Wuke Hotel, Beijing*

19:30 Shuttlebus leaving for the Novotel Hotel

## October 20<sup>th</sup>, 2008 Monday

8:25 Boarding in front of hotel 8:30 Leaving for the Seminar
## Particle Physics I ##
<p><b>(Chair: Liu Weiping)</b> (9:00--9:30) Theoretical Overview of Massive Neutrinos <b>Xing Zhizhong (IHEP)</b></p> <p>(9:30--10:00) T2K and Neutrino Experiments with Accelerators <b>K. Nishikawa (KEK)</b></p> <p>(10:00--10:30) Daya Bay and Neutrino Experiments with Reactors <b>Wang Yifang (IHEP)</b></p>
(10:30--11:00) Coffee
## Material Science I ##
<p><b>(Chair: M. Arai)</b> (11:00--11:30) Small Angle Neutron Scattering and Neutron Reflectometer at CARR <b>Charles C. Han (ICCAS)</b></p> <p>(11:30-12:00) Atomic Scale Studies of Hydrogen-Related Materials by Neutron Scattering <b>T. Otomo (KEK)</b></p> <p>(12:00--12:30) Polarized Neutrons in Condensed Matter Investigations <b>K. Kakurai (JAEA)</b></p>
(12:30-14:00) Lunch
<i>Parallel (A1)</i> ## Workshop on Materials(I) ##
<p style="text-align: center;"><b>(Chair: K. Kakurai &amp; Chun Loong) Mtg Rm 1: 5th floor of CCAST</b></p> <p>Interplay Between Magnetic Order and Superconductivity in Cuprates <b>Y. Koike (Tohoku)</b></p> <p>Exotic Superconductivity Probed by muSR <b>W. Higemoto (JAEA)</b></p> <p>Studies on Spin Dynamics using Pulsed Neutrons <b>S. Itoh (KEK)</b></p> <p>Neutron Scattering Studies of Transition Metal Oxides: Tl<sub>2</sub>Ru<sub>2</sub>O<sub>7</sub> and RMnO<sub>3</sub> <b>Je-Geun Park (SungKyunkwan)</b></p> <p>Oral and Poster Presentations by Young Participants</p>
<i>Parallel (A2)</i> ## Workshop on Materials(II) ##
<p><b>(Chair: Hu Zhongbo &amp; R. Kadono)</b>      <b>Mtg Rm 2: 5th floor of CCAST</b></p>

Hydrogen Bonding in Hydrogen Storage Material: Implication for H Kinetics from Muon Study

**R. Kadono (KEK)**

In Situ Neutron Diffraction During Processing and Mechanical Response of Advanced Steels

**Y. Tomota (Ibaraki)**

Distribution of Local Structures in Application Materials Observed by Scanning Neutron Diffraction Technique

**K. Ohyama (Tohoku)**

Structure Analysis of nano-crystals and other Non-random-defect Materials

**Hu Zhongbo(CAS)**

Oral and Poster Presentations by Young Participants

**Parallel (B)**

## Workshop on Particle Physics I (Neutrino) ##

**(Chair: A. Ichikawa & Zhao Enguang) Mtg Rm 3: 3th floor of ITP, same building of CCAST**

What and How T2K Will Bring Out about Neutrino Mixing

**A. Ichikawa (Kyoto)**

KamLAND : Updated Results and Future Prospect

**Y. Gando (Tohoku)**

RENO Project and Low Energy Neutrino Experiments

**Yeong-Duk Kim (Sejong)**

Oral and Poster Presentations by Young Participants

18:15 Shuttlebus leaving for Novotel Hotel

18:30 Shuttlebus leaving for Novotel Hotel

## October 21<sup>st</sup>, 2008 Tuesday

8:25 Boarding in front of hotel 8:30 Shuttlebus leaving for the Seminar
## Nuclear Physics I ##
<b>(Chair: Zhu Lihua)</b> (9:00--9:30) Hadron Physics at J-PARC <b>J. C. Peng (Illinoi)</b> (9:30--10:00) A New Scheme for the Lowest $1/2^-$ Baryon Nonet and Decuplet <b>Zou Bingsong (IHEP)</b> (10:00--10:30) Selected Topics in Nuclear Structure <b>Meng Jie (PKU)</b>
(10:30--11:00) Coffee
## Life Science ##
<b>(Chair: Wang Fangwei)</b> (11:00--11:30) Neutron Protein Crystallography: Hydrogen, Proton & Hydration in Bio-macromolecules <b>N. Niimura (Ibaraki)</b> (11:30-12:00) Protein Dynamics and Structure Studied by Neutron Scattering <b>M. Kataoka (Nara)</b> ## Science with Muons ## <b>(Chair: Wang Fangwei)</b> (12:00--12:30) Muons for Materials, Life and Industrial Sciences <b>K. Nagamine (Tokyo)</b>
(12:30-14:00) Lunch
<b>Parallel (A1)</b> ## Workshop on Biomaterial ##
<b>(Chair: N. Niimura &amp; Jiang Lei)</b> <b>Mtg Rm 1: 5th floor of CCAST</b> Inhibitor Recognition through Low Barrier Hydrogen Bonds and Oxianion Hole in Porcine Pancreatic Elastase Revealed by Neutron Crystallography <b>T. Tamada (JAEA)</b> Neutrons are Important Probes for Structural Biology ? --D55:D56-Structural and Functional Analyses of EndoPGI by X-Ray and Neutron Diffraction-- <b>M. Sato (Yokohama)</b> Frontier Research on Biological Nano-Materials in China

<b>Jiang Lei (ICCAS)</b>	
The Study of Radiobiological Effects Induced by Heavy Ions and Proton at CIAE	
<b>Wang Xiao(CIAE)</b>	
Oral and Poster Presentations by Young Participants	
<b>Parallel (A2)</b>	<b>## Workshop on Soft Matter ##</b>
<b>(Chair: T. Kanaya &amp; Tsang-Lang Lin)</b>	
Mtg Rm 2: 5th floor of CCAST	
Neutron Scattering Study on Deformed Gels	
<b>M. Shibayama (Tokyo)</b>	
Polymer Dynamics by Neutron Scattering	
<b>T. Kanaya (Kyoto)</b>	
Applying Neutron and X-ray Scattering for Studying Colloids and Biomaterials	
<b>Tsang-Lang Lin (Taibei)</b>	
Mysteries at Polymer Interfaces: Will Neutron Solve the Problems?	
<b>Zhao Jiang (ICCAS)</b>	
Oral and Poster Presentations by Young Participants	
<b>Parallel (B) ## Workshop on Nuclear Physics I (Strangeness and Nuclear Structure) ##</b>	
<b>(Chair: H. Tamura &amp; Zhu Lihua)</b>	
Mtg Rm 3: 3th floor of ITP, same building of CCAST	
$(\square, K^+)$ Hypernuclear Spectroscopy	
<b>H. Noumi (Osaka)</b>	
Precision Hypernuclear Spectroscopy by Electroproduction at JLAB	
<b>L. Tang (Hampton)</b>	
A Search for Deeply-Bound Kaonic Nuclear States	
<b>H. Onishi (RIKEN)</b>	
Some Theoretical Aspects of Strangeness Physics--Kaon Condensation or Deconfinement Phase Transition	
<b>Peng Guangxiong (IHEP)</b>	
Oral and Poster Presentations by Young Participants	
18:15	Shuttlebus leaving for Novotel
18:30	Shuttlebus leaving for Novotel

## October 22<sup>nd</sup>, 2008 Wednesday

8:25 Boarding in front of hotel 8:30 Shuttlebus leaving for the Seminar
## Asian Facilities and New Projects ##
<p><b>(Chair: Nagamine)</b> (9:00--9:30) Particle Accelerators in China <b>Zhang Chuang (IHEP)</b></p> <p>(9:30--9:55) Perspective of BRIF project in CIAE and progress of nuclear astrophysics <b>Liu Weiping (CIAE)</b></p> <p>(9:55--10:20) Synchrotron facility in China <b>Xu Hongjie (SSRF)</b></p>
(10:20--10:50) Coffee
<p><b>(Chair: Xu Hongjie)</b> (10:50--11:15) Growth Strategy of Neutron Science at KAERI <b>Kye-Hong Lee (KAERI)</b></p> <p>(11:15--11:40) Status of the Proton Engineering Frontier Project <b>Yong-Sub Cho (KAERI)</b></p> <p>(11:40--12:05) The Design and Progress of Taiwan Photon Source <b>Mau-Tsu Tang (NSRRC)</b></p> <p>(12:05--12:30) Status of Pohang Light Source <b>Bong-Soo Kim (PAL)</b></p>
( 12:30-- ) Lunch
13:10 Boarding in front of Wuke Restaurant for the Excursion to the Great Wall (Only for Excursion registered Participants)
14:00 Training Courses for Neutron Scattering Experiment at CARR and CSNS for All Chinese Young Scientists
<b>(Chair: Charles C. Han &amp; Chen Dongfeng)</b>

## October 23<sup>rd</sup>, 2008 Thursday

8:25 Boarding in front of hotel 8:30 Shuttlebus leaving for the Seminar
## Particle Physics II ##
<p><b>(Chair: Y. Kuno)</b> (9:00--9:30) Review of Kaon Experiments <b>T. Yamanaka (Osaka)</b></p> <p>(9:30--10:00) High Energy Physics at BES <b>Jin Shan (IHEP)</b> ## Nuclear Physics II ##</p> <p><b>(Chair: Xia Haihong)</b> (10:00--10:30) Strangeness Nuclear Physics at J-PARC <b>T. Nagae (Kyoto)</b></p>
(10:30--11:00) Coffee
<p>(11:00--11:30) Recent Progress in Strangeness Nuclear Physics <b>E. Hiyama (RIKEN)</b></p>
## Material Science II ##
<p><b>(Chair: K. Yamada)</b> (11:30--12:00) Neutron Scattering Study on Magnetic Materials in IOP <b>Wang Fangwei (IOP)</b></p> <p>(12:00--12:30) Industrial Application of Neutron Scattering in CIAE <b>Liu Yuntao (CIAE)</b></p>
(12:30-14:00) Lunch
<i>Parallel (A1)</i> ## Workshop on Radiography ##
<p><b>(Chair: M. Matsubayashi &amp; Guo Zhiyu)</b>      <span style="color: magenta;">Mtg Rm 2: 5th floor of CCAST</span> Neutron Radiography as a Nondestructive Imaging Tool <b>M. Matsubayashi (JAEA)</b></p> <p>Current Neutron Radiography Study in China <b>Guo Zhiyu (PKU)</b></p> <p>Future Neutron Imaging Development at CIAE <b>Wang Hongli (CIAE)</b></p> <p>Development of a Phase Imaging System with Gratings at a Monochromatized Cold Neutron Beamline (Tentative) <b>Seung-Wook Lee (KAERI)</b></p>

Oral and Poster Presentations by Young Participants	
<b>Parallel (A2)</b>	<b>## Workshop on Materials (III) ##</b>
(Chair: <b>T. Kamiyama &amp; Liu Yuntao</b> )	<b>Mtg Rm 1: 5th floor of CCAST</b>
Materials Science using Neutron Powder Diffraction	
<b>T. Kamiyama (KEK)</b>	
Novel Magnetism in High- $T_c$ Superconductors	
<b>M. Fujita (Tohoku)</b>	
Industrial Applications of Neutron Diffraction in Japan	
<b>M. Hayashi (Ibaraki Pref.)</b>	
Introduction to Neutron Pair Distribution Function Analysis and its Application to Relaxor Ferroelectrics	
<b>Il-Kyung Jeong (Pusan)</b>	
Oral and Poster Presentations by Young Participants	
<b>Parallel (B)</b>	<b>## Workshop on Particle Physics II (Flavor Physics) ##</b>
(Chair: <b>T. Yamanaka &amp; Zhou Shangui</b> )	<b>Mtg Rm 3: 3th floor of ITP, same building of CCAST</b>
Flavor at the Frontier of TeV Scale Physics	
<b>Wei-Shu Hou (Taibei)</b>	
KOTO – $K_L \rightarrow \pi^0 \pi^+ \pi^-$ Experiment at the J-PARC	
<b>Gei-Youb Lim (KEK)</b>	
Measurement of T-Violating Muon Polarization in	
$K^+ \rightarrow \pi^0 \pi^+ \pi^-$ decay at J-PARC	
<b>S. Shimizu (Osaka)</b>	
Lepton Flavour Violating Muon Decay Search Experiment at PSI	
<b>S. Mihara (KEK)</b>	
Oral and Poster Presentations by Young Participants	
18:15	Shuttlebus leaving for Novotel Hotel
18:30	Shuttlebus leaving for Novotel Hotel

## October 24<sup>th</sup>, 2008 Friday

8:25 Boarding in front of hotel 8:30 Leaving for the Seminar
## Symmetries in Particle and Nuclear Physics ##
<p><b>(Chair: Chen Yongshou)</b> (9:00--9:30) Fundamental Physics using Cold Neutrons <b>H. M. Shimizu (KEK)</b></p> <p>(9:30--10:00) Physics of Lepton Flavor Violation of Charged Leptons and Future Prospects <b>Y. Kuno (Osaka)</b></p> <p style="text-align: center;">## New Techniques with Neutron, Photon and Muon Beams ##</p> <p><b>(Chair: Chun Loong)</b> (10:00--10:30) Controlling Uncontrollable Neutrons <b>M. Furusaka (Hokkaido)</b></p>
(10:30--11:00) Coffee
<p>(11:00--11:30) Complementary Use of Photon, Neutron, and Muon <b>Y. Murakami (Tohoku)</b> ## Nuclear Transmutation and ADS ##</p> <p><b>(Chair: Fu Shinian)</b> (11:30--12:00) ADS Experimental Facility Project at J-PARC <b>Y. Kiyonagi (Hokkaido)</b></p> <p>(12:00--12:30) The Researches of ADS and the Sustainable Development of the Nuclear Energy <b>Xia Haihong (CIAE)</b></p>
(12:30-14:00) Lunch
<b>Parallel (A)</b> ## User Meeting for J-PARC MSL ##
<p style="color: #e91e63;">Mtg Rm 1 &amp; 2    Mtg Rm 1: 5th floor of CCAST;    Mtg Rm 2: 5th floor of CCAST</p> <p>Neutron Users Programs at J-PARC and JRR-3 <b>Y. Fujii (JAEA)</b></p> <p>J-PARC User Information <b>M. Ieiri (KEK)</b></p> <p>Panel Discussion (<b>Chair: Y. Endoh</b>) Panelists (to be confirmed)</p> <p style="text-align: center;"><b>China: Loong Chun, Wang Fangwei, Chen Dongfeng</b> <b>Korea: Kye-Ho Lee, Yong-Sub Cho, Bong-Soo Kim</b> <b>Japan: Y. Fujii, Y. Murakami</b></p>

<b>Taibei: Tsang-Lang Lin, Mau-Tsu Tang</b>	
<b>Parallel (B)</b>	## Workshop on Nuclear Physics II (Hadrons) ##
<p>(Chair: Meng Jie &amp; H. Tamura) Mtg Rm 3: 3th floor of ITP, same building of CCAST  Hadron Experiments at J-PARC</p> <p style="text-align: center;"><b>S. Sawada (KEK)</b>  In-Medium Nucleon Properties via Coulomb Sum Rule</p> <p style="text-align: center;"><b>Seon-Ho Choi (Seoul)</b>  Chiral Properties in Nuclear Medium</p> <p style="text-align: center;"><b>K. Ozawa (Tokyo)</b>  Hyperon Physics at SPring-8 and J-PARC</p> <p style="text-align: center;"><b>Jung-Keun Ahn (Pusan)</b></p> <p>Recent Progress in the Applications of Chiral Perturbation Theory and Chiral Unitary Theory</p> <p style="text-align: center;"><b>Geng Lisheng (Valencia)</b>  Oral and Poster Presentations by Young Participants</p>	
<b>Parallel (B)</b>	## Meeting for J-PARC Hadron Hall Users ##
Chaired by <b>S. Sawada (KEK)</b> J-PARC Hadron Hall Users Association Meeting	
Farewell Banquet 18:00 Shuttlebus leaving for Farewell Banquet Address: Shi Xing Bei Street, Shen Nong Zhuang Yuan Hotel, Beijing	

## October 25<sup>th</sup>, 2008 Saturday

8:25 Boarding in front of hotel
8:30 Leaving for the Seminar
## Future Directions ##
<b>(Chair: K. H. Lee)</b> (9:00--9:30) Future Direction of Material Science <b>Chun Loong (Argonne)</b>
(9:30--10:00) Current and Future Direction of CIAE <b>Zhao Zhixiang (CIAE)</b>
(10:00--10:30) Coffee
<b>(Chair: O. Hashimoto)</b> (10:30--11:00) Status and Prospect of Frontier Researches in IHEP <b>Chen Hesheng (IHEP)</b>
(11:00--11:30) Prospect of Frontier Science at KEK <b>A. Suzuki (KEK)</b>
<b>(Chair: O. Hashimoto)</b> (11:30--11:45) Concluding Remarks <b>Du Xiangwan (CAE,CPS)</b>
12:00 One Shuttlebus Leaving for Capital Airport Terminal 3
12:00 One Shuttlebus Leaving for Novotel Hotel

## October 26<sup>th</sup>, 2008 Sunday

6:15 One Shuttlebus leaving for Capital Airport Terminal 3
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**Workshop on Material and Biological Science (A1)**

October 20th (Mon)	October 21st (Tue)	October 23rd (Thu)
<p><b>Parallel (A1) ## Workshop on Materials(I) ##</b> (Chair: Kakurai &amp; Loong) Mtg Rm 1</p> <p>(14:00--14:25) Interplay Between Magnetic Order and Superconductivity in Cuprates <b>Y. Koike (Tohoku)</b></p> <p>(14:25--14:50) Exotic superconductivity Probed by muSR <b>W. Higemoto (JAEA)</b></p> <p>(14:50--15:15) Studies on Spin Dynamics using Pulsed Neutrons <b>S. Itoh (KEK)</b></p> <p align="center">(15:15--15:30) coffee</p> <p>(15:30--15:55) Neutron Scattering Studies of Transition Metal Oxides: <math>Ti_2Ru_2O_7</math> and <math>RMnO_3</math> <b>Je-Geun Park (SungKyunkwan)</b></p> <p>(15:55--16:30) Short Oral Presentations by Young Participants ( 5min - 10 min/each) <b>(Y. Tanabe, M. Hiraishi, M. Miyazaki, H. Okabe)</b></p> <p>Ni-substitution effect on Cu-spin correlation in <math>La_{2-x}Sr_xCu_{1-y}Ni_yO_4</math> studied by the muon-spin-relaxation measurements <b>Y. Tanabe</b></p> <p>Anomalous quasiparticle excitation in Li-intercalated layered superconductor <math>Li_xZrNiCl</math> <b>M. Hiraishi</b></p> <p>Unconventional phase diagram of (Bi,Pb)2201 cuprates <b>M. Miyazaki</b></p> <p>Magnetic ground state of <math>Mo_3Sb_7</math> <b>H. Okabe</b></p> <p align="center">(16:30--17:30) Poster Session with coffee</p>	<p><b>Parallel (A1) ## Workshop on Biomaterial ##</b> (Chair: Niimura &amp; Jiang Lei)Mtg Rm 1</p> <p>(14:00--14:25) Inhibitor Recognition through Low Barrier Hydrogen Bonds and Oxianion Hole in Porcine Pancreatic Elastase Revealed by Neutron Crystallography <b>T. Tamada (JAEA)</b></p> <p>(14:25--14:50) Neutrons are important probes for structural biology ? -D55:D56-Structural and Functional Analyses of EndoPGI by X-Ray and Neutron Diffraction-- <b>M. Sato (Yokohama)</b></p> <p>(14:50-15:15) Frontier Research on Biological Nano-materials in China <b>Jiang Lei (ICCAS)</b></p> <p>(15:15-15:40) The Study of Radiobiological Effects Induced by Heavy Ions and Proton at CIAE <b>Wang Xiao(CIAE)</b></p> <p align="center">(15:40--15:55) coffee</p> <p>(15:55--16:30) Short Oral Presentations by Young Participants ( 5min - 10 min/each) <b>(T. Yamada, H. Nakagawa)</b></p> <p>A Neutron Crystallographic Analysis of a Bovine Ribonuclease A at 1.4 Å Resolution <b>T. Yamada</b></p> <p>Structure and dynamics of the protein hydration water at the protein dynamical transition <b>H. Nakagawa</b></p> <p align="center">Zhang Hongxia</p> <p align="center">(16:30--17:30) Poster Session with coffee</p>	<p><b>Parallel (A1) ## Workshop on Radiography ##</b> (Chair: Matsubayashi &amp; Guo Zhiyu)Mtg Rm 2</p> <p>(14:00--14:25) Neutron radiography as a nondestructive imaging tool <b>M. Matsubayashi (JAEA)</b></p> <p>(14:25--14:50) Current Neutron Radiography Study in China <b>Guo Zhiyu (Peking)</b></p> <p>(14:50-15:15) Future Neutron Imaging Development at CIAE <b>Wang Hongli (CIAE)</b></p> <p>(15:15-15:40) Development of a Phase Imaging System with Gratings at a Monochromatica Cold Neutron Beamline (Tentative) <b>Seung-wook Lee (KAERI)</b></p> <p align="center">(15:40--15:55) coffee</p> <p>(15:55--16:30) Short Oral Presentations by Young Participants ( 5min - 10 min/each) <b>(H. Sato) Zou Yubin, Wen Weiwei, Li Hang, Zhang Xueshuang</b></p> <p>Development of spectroscopic neutron transmission imaging with pulsed neutron source <b>H. Sato</b></p> <p>Experimental Study of Fast Neutron Resonance Radiography on Peking University 4.5 Van de Graaff Accelerator <b>Zou Yubin</b></p> <p>Low Flux Thermal Neutron Radiography Based on D-Be Reaction neutron source <b>Wen Weiwei</b></p> <p>Simulation Study of CCD Camera Shield for Accelerator Based Neutron Radiography <b>Li Hang</b></p> <p>Fast Neutron Radiography Converters Developed at Peking University <b>Zhang Xueshuang</b></p> <p align="center">(16:30--17:30) Poster Session with coffee</p>

Workshop on Material and Biological Science (A2)

October 20th ( Mon )	October 21st ( Tue )	October 23rd ( Thu )
<p><b>Parallel (A2) ## Workshop on Materials(II) ##</b> (chair: Hu Zhongbo &amp; Kadono)Mtg Rm 2</p> <p>(14:00--14:25) Hydrogen Bonding in Hydrogen Storage Material: Implication for H Kinetics from Muon Study <b>R. Kadono (KEK)</b></p> <p>(14:25--14:50) In Situ Neutron Diffraction During Processing and Menanical Responce of Advanced Steels <b>Y. Tomota (Ibaraki)</b></p> <p>(14:50--15:15) Distribution of Local Structures in Application Materials Observed by Scanning Neutron Diffraction Technique <b>K. Ohoyama (Tohoku)</b></p> <p>(15:15--15:40) Neutron Diffraction Study on Novel Materials in Graduate School of CAS <b>Hu Zhongbo(CAS)</b></p>	<p><b>Parallel (A2) ## Workshop on Soft Matter ##</b> (Chair: Kanaya &amp; Tsang-Lang Lin)Mtg Rm 2</p> <p>(14:00--14:25) Neutron Scattering Study on Deformed Gels <b>M. Shibayama (Tokyo)</b></p> <p>(14:25--14:50) Polymer Dynamics by Neutron Scattering <b>T. Kanaya (Kyoto)</b></p> <p>(14:50--15:15) Applying Neutron and X-ray Scattering for Studying Colloids and Biomaterials <b>Tsang-Lang Lin (Taiwan)</b></p> <p>(15:15-15:40) Mysteries at polymer interfaces: will neutron solve the problems? <b>Zhao Jiang (ICCAS)</b></p>	<p><b>Parallel (A2) ## Workshop on Materials (III) ##</b> (Chair: Kamiyama &amp; Liu Yuntao)Mtg Rm 1</p> <p>(14:00--14:25) Materials Science using Neutron Powder Diffraction <b>T Kamiyama (KEK)</b></p> <p>(14:25--14:50) Novel magnetism in high-Tc superconductors <b>M. Fujita (Tohoku)</b></p> <p>(14:50--15:15) Industrial Applications of Neutron Diffraction in Japan <b>M. Hayashi (Ibaraki Pref.)</b></p> <p>(15:15--15:40) Introduction to neutron pair distribution function analysis and its application to relaxor ferroelectrics <b>Il-Kyung Jeong (Pusan)</b></p>
(15:40--15:55) coffee	(15:40--15:55) coffee	(15:40--15:55) coffee
(15:55--16:30) Short Oral Presentations by Young Participants ( 5min - 10 min/each) ( <a href="#">N. Ishikawa</a> ) <a href="#">Wu Meimei</a> , <a href="#">Han Wenze</a>	(15:55--16:30) Short Oral Presentations by Young Participants ( 5min - 10 min/each) ( <a href="#">N. Yamada</a> , <a href="#">Y. Okusawa</a> ), <a href="#">Li Tianfu</a> , <a href="#">Cheng He</a> , <a href="#">Yuan Guangcui</a>	(15:55--16:30) Short Oral Presentations by Young Participants ( 5min - 10 min/each) ( <a href="#">M. Enoki</a> , <a href="#">K. Kawashima</a> , <a href="#">K. Saito</a> , <a href="#">N. Kase</a> ) <a href="#">GaoYukui</a>
Unified approach of designing bender /neutron guide tube <b>N. Ishikawa</b>	Nanopore Formation on Uni-Lamellar Vesicles of Long- and Short-Chain Lipids <b>N. Yamada</b>	Search for universal spin correlation in single-layer high Tc superconductor <b>M. Enoki</b>
Controllable thermal expansion in Yb <sub>2</sub> -xCrxMo <sub>3</sub> O <sub>12</sub> <b>Wu Meimei</b>	Prototype development of a time-of-flight small-angle neutron scattering instrument with an ellipsoidal focusing mirror at Hokkaido university <b>Y. Okusawa</b>	Structural phase transition and uperconductivity in a clathrate-type silver-oxide Ag <sub>6</sub> O <sub>8</sub> AgNO <sub>3</sub> <b>K. Kawashima</b>
Crystal structure and Magnetic property of R <sub>5</sub> Si <sub>3</sub> and NdXEr <sub>5</sub> -XSi <sub>3</sub> <b>Han Wenze</b>	Assess the Intramolecular Cavity of a PAMAM Dendrimer in Aqueous Solution by Small Angle Neutron Scattering <b>Li Tianfu</b>	4f electron state and superlattice structure of Pr(Ru <sub>1-x</sub> Rh <sub>x</sub> ) <sub>4</sub> P <sub>12</sub> <b>K. Saito</b>
Recent Progress of Neutron Guide at CARR <b>Liang Feng</b>	Co-solvency or Co-nonsolvency--An Investigation of Mixed-Solvent-Structure in THF Aqueous Solution <b>Cheng He</b>	Coexistence of magnetism and superconductivity in the Tm-based heavy fermion superconductor <b>N. Kase</b>
	Neutron Reflectometry Studies of Thin Films and Multilayered Materials <b>Yuan Guangcui</b>	Residual Stresses Measured by Neutron Scattering <b>GaoYukui</b>
(16:10--17:30) Poster Session with coffee	(16:20--17:40) Poster Session with coffee	(16:10--17:30) Poster Session with coffee

## Workshop on Particle and Nuclear Physics (B)

October 20th ( Mon )	October 21st ( Tue )	October 23rd ( Thu )	October 24th ( Fri )
<p><i>Parallel (B) ##</i> Workshop on Particle Physics I (Neutrino) ## (Chair: A. Ichikawa &amp; Zhao Enguang) <span style="color: magenta;">Mtg Rm 3</span></p> <p>(14:00–14:25) What and How T2K Will Bring Out about Neutrino Mixing A. Ichikawa (Kyoto)</p> <p>(14:25–14:50) KamLAND : Updated Results and Future Prospect Y. Gando (Tohoku)</p> <p>(14:50–15:15) RENO Project and Low Energy Neutrino Experiments Yeong-Duk Kim (Sejong)</p>	<p><i>Parallel (B) ##</i> Workshop on Nuclear Physics I (Strangeness and Nuclear Structure) ## (Chair: H. Tamura &amp; Zhu Lihua) <span style="color: magenta;">Mtg Rm 3</span></p> <p>(14:00–14:20) (<math>\pi, K^*</math>) Hypernuclear Spectroscopy H. Noumi (Osaka)</p> <p>(14:20–14:40) Precision Hypernuclear Spectroscopy by Electroproduction at JLAB L. Tang (Hampton)</p> <p>(14:40–15:00) A Search for Deeply-Bound Kaonic Nuclear States H. Onishi (RIKEN)</p> <p>(15:00-15:20) Some Theoretical Aspects of Strangeness Physics –Kaon Condensation or Deconfinement Phase Transition Peng Guangxiang (IHEP)</p>	<p><i>Parallel (B) ##</i> Workshop on Particle Physics II (Flavor Physics) ## (Chair: T. Yamanaka &amp; Zhou Shangui) <span style="color: magenta;">Mtg Rm 3</span></p> <p>(14:00–14:30) Flavor at the Frontier of TeV Scale Physics Wei-Shu Hou (Taiwan)</p> <p>(14:30–14:50) KOTO – <math>K_L \rightarrow \pi^0 \nu \nu</math> Experiment at the J-PARC Gei-Youb Lim (KEK)</p> <p>(14:50–15:10) Measurement of T-Violating Muon Polarization in <math>K^* \rightarrow \pi^0 \mu^+ \nu</math> decay at J-PARC S. Shimizu (Osaka)</p> <p>(15:10–15:30) Lepton Flavour Violating Muon Decay Search Experiment at PSI S. Mihara (KEK)</p>	<p><i>Parallel (B) ##</i> Workshop on Nuclear Physics II (Hadrons) ## (Chair: Meng Jie &amp; H. Tamura) <span style="color: magenta;">Mtg Rm 3</span></p> <p>(14:00-14:20) Hadron Experiments at J-PARC S. Sawada (KEK)</p> <p>(14:20–14:40) In-Medium Nucleon Properties via Coulomb Sum Rule Seon-Ho Choi (Seoul)</p> <p>(14:40–15:00) Chiral Properties in Nuclear Medium K. Ozawa (Tokyo)</p> <p>(15:00-15:20) Hadron Physics at SPring-8 and J-PARC Jung-Keun Ahn (Pusan)</p>
(15:15–15:30) coffee	(15:20–15:35) coffee	(15:30–15:45) coffee	(15:20–15:35) coffee
<p>(15:30–15:50) Instantaneous-Shape Sampling for Calculating the Electromagnetic Dipole Strength in Transitional Nuclei Zhang Shuangquan ( PKU )</p> <p>(15:50–16:10) Short Oral Presentations by Young Participants (5min x 4 = 20min)</p> <p>Development and Production of the T2K Muon Monitor K. Matsuoka (Kyoto)</p> <p>A Detector to Measure Neutrino Beam Asymmetry at the T2K ND280 Hall H. Kaji (Tokyo)</p> <p>Detection of Low Energy Solar Neutrinos with KamLAND K. Nakajima (Tohoku)</p> <p>Double Beta Decay Experiment with <math>\text{CaMoO}_4</math> Crystal. Woon-Gu Kang (Sejong)</p>	<p>(15:35–16:20) Short Oral Presentations by Young Participants (5min x 9 = 45 min)</p> <p>Hypernuclear Gamma-Ray Spectroscopy, the Idea and the Recent Results Ma Yue (Tohoku)</p> <p>Hypernuclear Gamma-Ray Spectroscopy: Next Generation Experiments at J-PARC K. Hosomi (Tohoku)</p> <p>Status Report on J-PARC E15 Experiment (Search for Kaonic Nuclear Bound states) T. Hiraiwa (Kyoto)</p> <p>Status Report on J-PARC E05 Experiment (Spectroscopy of <math>\Xi</math> Hypernuclei) M. Moritsu (Kyoto)</p> <p>Kaonic Atom Experiment at J-PARC H. Tatsuno (Tokyo)</p> <p>Photoproduction of the Neutral Kaon on the Deuteron in the Threshold Region at LNS K. Tsukada (RIKEN)</p> <p>Self-Consistent Covariant Descriptions of Spin-Isospin Resonances Liang Haozhao ( PKU )</p> <p>Avoid the Disaster of Dirac Sea in Imaginary Time Step Method Ying Zhang ( PKU )</p> <p>Chiral Bands with Two Protons and One Neutron-Hole Configuration in <math>^{135}\text{Nd}</math> Qi Bin ( PKU )</p>	<p>(15:45–16:10) Short Oral Presentations by Young Participants (5min x 5 = 25min)</p> <p>Sensitivity and Background Study for <math>K_L \rightarrow \pi^0 \nu \nu</math> Experiment K. Shiomi (Kyoto)</p> <p>Design of Neutral Beam-Line for KOTO Experiment (Search for <math>K_L^0 \rightarrow \pi^0 \nu \nu</math> decay) T. Shimogawa (Saga)</p> <p>R&amp;D on a Proton Extinction Monitor for an Experiment to Search for a Lepton Flavor Violating Muon to Electron Conversion N. Nakadozono (Osaka)</p> <p>MEG experiment —the Xenon Liquid <math>\gamma</math>-Ray Detector and its Calibration Bai Xue (Tokyo)</p> <p>Neutron Lifetime Experiment with Pulsed Neutron Beam at J-PARC H. Otono (Tokyo)</p>	<p>(15:35-15:55) Recent Progress in the Applications of Chiral Perturbation Theory and Chiral Unitary Theory Geng Lisheng (Valencia)</p> <p>(15:55–16:20) Short Oral Presentations by Young Participants (5min x 5 = 25min)</p> <p>Results on DVCS from HERMES Nuclear Targets Ye Hongxue (PKU)</p> <p>Current status of High Statistics Experiment for <math>\Theta^+</math> Search at SPring-8/LEPS Y. Kato (Osaka)</p> <p>A Solid H2/D2 Target for a 4pi EM Calorimeter FOREST R. Hashimoto (Tohoku)</p> <p>Development of a Tungsten Scintillating-Fiber Detector Kwang-Yun Baek (Pusan)</p> <p>Coincidence Measurement of the Weak Decay of <math>^{12}\text{C}</math> and the Three-Body Weak Interaction Process. Kyoung-Ho Tshoo (Seoul)</p>
(16:10–17:30) Poster Session with coffee	(16:20–17:40) Poster Session with coffee	(16:10–17:30) Poster Session with coffee	(16:20–17:40) Poster Session with coffee
			<p><i>Parallel (B) ##</i> Meeting for J-PARC Hadron Hall Users ## (17:40–17:55) Chaired by S. Sawada (KEK) J-PARC Hadron Hall Users Association Meeting</p>
			Farewell Banquet
	(16:20–17:40) Poster Session with coffee		

## Lecturers

Name in full	Position/	Affiliation/Institution	(Country of affiliated institution)	Remarks
-Japan side				
Shoji Nagamiya	Professor, Director	KEK (J-PARC Center)	Japan	
Yoshishige Yamazaki	Professor, Vice Director	KEK (J-PARC Center)	Japan	
Masaharu Ieiri	Associate Professor	KEK	Japan	
Yoshiaki Kiyanagi	Professor	Hokkaido University	Japan	*
Atsuto Suzuki	Professor, President	KEK	Japan	
Kazuhiro Tanaka	Professor	KEK	Japan	
Kouichirou Nishikawa	Professor	KEK	Japan	
Tomofumi Nagae	Professor	Kyoto University	Japan	
Taku Yamanaka	Professor	Osaka University	Japan	
Emiko Hiyama	Principal Researcher	RIKEN	Japan	
Hirohiko Shimizu	Professor	KEK	Japan	
Yoshitaka Kuno	Professor	Osaka University	Japan	*
Atsuko Kondo Ichikawa	Assistant Professor	Kyoto University	Japan	*
Yoshihito Gando	Assistant Professor	Tohoku University	Japan	
Satoshi Mihara	Associate Professor	KEK	Japan	
Suguru Shimizu	Assistant Professor	Osaka University	Japan	
Hiroyuki Noumi	Professor	Osaka University	Japan	*
Hiroaki Onishi	Researcher	RIKEN	Japan	
Shinya Sawada	Associate Professor	KEK	Japan	
Kyoichiro Ozawa	Lecturer	University of Tokyo	Japan	
Masatoshi Arai	Professor	JAEA	Japan	
Fujio Maekawa	Researcher	JAEA	Japan	
Kazuhisa Kakurai	Principal Researcher	JAEA	Japan	
Nobuo Niimura	Professor	Ibaraki University	Japan	*
Mikio Kataoka	Professor	Nara Institute of Science and Technology	Japan	*
Kanetada Nagamine	Professor Emeritus	KEK	Japan	*
Michihiro Furusaka	Professor	Hokkaido University	Japan	*
Youichi Murakami	Professor	Tohoku University	Japan	
Youji Koike	Professor	Tohoku University	Japan	*
Ryosuke Kadono	Professor	KEK	Japan	
Wataru Higemoto	Senior researcher	JAEA	Japan	
Shinichi Itoh	Associate Professor	KEK	Japan	
Kenji Ohyama	Associate Professor	Tohoku University	Japan	*
Yo Tomota	Professor	Ibaraki University	Japan	

Taro Tamada	Researcher	JAEA	Japan	
Mamoru Sato	Professor	Yokohama City University	Japan	
Mitsuhiro Shibayama	Professor	University of Tokyo	Japan	*
Toshiji Kanaya	Professor	Kyoto University	Japan	
Masahito Matsubayashi	Principal Researcher	JAEA	Japan	
Takashi Kamiyama	Professor	KEK	Japan	
Masaki Fujita	Associate Professor	Tohoku University	Japan	
Makoto Hayashi	Staff	Ibaraki prefecture	Japan	
Yasuhiko Fujii	Professor	JAEA	Japan	
Yasuo Endoh	Professor Emeritus	Tohoku University	Japan	*
Gei-Youb Lim	Associate Professor	KEK	Japan	
-China side				
Wang Yifang	Professor	IHEP (Institute of High Energy Physics, CAS)	China	
Peng Guangxiong	Professor	IHEP (Institute of High Energy Physics, CAS)	China	
Jin Shan	Professor	IHEP (Institute of High Energy Physics, CAS)	China	
Xing Zhizhong	Professor	IHEP (Institute of High Energy Physics, CAS)	China	
Zhang Chuang	Professor	IHEP (Institute of High Energy Physics, CAS)	China	
Chen Hesheng	Professor	IHEP (Institute of High Energy Physics, CAS)	China	
Zou Bingsong	Professor	IHEP (Institute of High Energy Physics, CAS)	China	
Wei Jie	Professor	CSNS (China Spallation Neutron Source)	China	
Meng Jie	Professor	PKU (Pekin University)	China	
Guo Zhiyu	Professor	PKU (Pekin University)	China	
Chen Jia-er	Professor	PKU (Pekin University)	China	
Hu Zhongbo	Professor	CAS (Chinese Academy of Science)	China	
Wang Fangwei	Professor	IOP (Institute of Physics)	China	
Han Jian-Guo	Professor	NSFC (Natural Science Foundation in China)	China	
Jiang Lei	Professor	ICCAS (Institute of Chemistry, CAS)	China	
Charles C. Han	Professor	ICCAS (Institute of Chemistry, CAS)	China	
Xu Hongjie	Professor	SSRF (Shanghai Synchrotron Radiation Facility)	China	
Chun Loong	Professor	Argonne National Laboratory	China	
T. D. Lee	Professor	Columbia University/ CCAST (China Center of Advanced Science and Technology)	China	
Wang Hongli	Professor	CIAE (China Institute of Atomic Energy)	China	
Liu Yuntao	Professor	CIAE (China Institute of Atomic Energy)	China	
Zhao Zhixiang	Professor	CIAE (China Institute of Atomic Energy)	China	
Liu Weiping	Professor	CIAE (China Institute of Atomic Energy)	China	
Wang Xiao	Professor	CIAE (China Institute of Atomic Energy)	China	
Xia Haihong	Professor	CIAE (China Institute of Atomic Energy)	China	
Zhao Jiang	Professor	ICCAS (Institute of Chemistry, CAS)	China	
Du Xiangwan	Professor	CAE, CPS (Chinese Academy of Engineering, Chinese Physical Society)	China	
Kai Sun	Professor	CIAE (China Institute of Atomic Energy)	China	

He Cheng	Assistant Professor	ICCAS (Institute of Chemistry, CAS)	China	
Guangcui Yuan	Assistant Professor	ICCAS (Institute of Chemistry, CAS)	China	
-Other Persons				
Jen-Chieh Peng	Professor	Illinois University, U.S.	USA	
Wei-Shu Hou	Professor	National Taiwan University	Taiwan	*
Li-Guang Tang	Professor	Hampton University, U.S.	USA	
Jung-Keun Ahn	Professor	Pusan University, Korea	Korea	*
Yeong-Duk Kim	Professor	Sejong University, Korea	Korea	*
Kye-Hong Lee	Director	KAERI (Korea Atomic Energy Research Institute)	Korea	*
Yong-Sub Cho	Principal Researcher	KAERI (Korea Atomic Energy Research Institute)	Korea	
Mau-Tsu Tang	Research Scientist	NSRRC (National Synchrotron Radiation Research Center, Taiwan)	Taiwan	*
Bong-Soo Kim	Division Head	POSTECH (Pohang University of Science and Technology, Korea)	Korea	*
Je-Geun Park	Professor	Sungkyunkwan University, Korea	Korea	*
Tsang-Lang Lin	Professor	National Tsing-Hua University, Taiwan	Taiwan	*
Il-Kyung Jeong	Associate Professor	Pusan University, Korea	Korea	*
Seung Wook Lee	Senior Researcher	KAERI (Korea Atomic Energy Research Institute)	Korea	*

Place a check [ \* ] in the Remark Column for those who participated using JSPS' s seminar funding

## Participants

Name in full	Position/	Affiliation/Institution	(Country of affiliated institution)	Remarks
-Japan side				
Kodai Matsuoka	Graduate student	Kyoto University	Japan	
Hiroshi Kaji	Postdoctoral fellow	University of Tokyo	Japan	*
Kyohei NAKAJIMA	Graduate student	Tohoku University	Japan	
Koji Shiomi	Graduate student	Kyoto University	Japan	*
Tetsushi SHIMOGAWA	Graduate student	Saga University	Japan	
Naoyuki Nakadozono	Graduate student	Osaka University	Japan	
Xue Bai	Graduate student	University of Tokyo	Japan	
Hidetoshi Otono	Graduate student	University of Tokyo	Japan	
Yue Ma	Graduate student	Tohoku University	Japan	
Kenji Hosomi	Graduate student	Tohoku University	Japan	*
Toshihiko Hiraiwa	Graduate student	Kyoto University	Japan	*
Hideyuki Tatsuno	Graduate student	University of Tokyo	Japan	*
Kyo Tsukada	Postdoctoral fellow	RIKEN	Japan	
Yuji Kato	Graduate student	Osaka University	Japan	*
Ryo Hashimoto	Graduate student	Tohoku University	Japan	*
Taro Yamada	Postdoctoral fellow	Ibaraki University	Japan	
Norifumi YAMADA	Postdoctoral fellow	KEK	Japan	*
Hiroataka Sato	Graduate student	Hokkaido University	Japan	*
Yoichi Tanabe	Graduate student	Tohoku University	Japan	*
Masanori Enoki	Graduate student	Tohoku University	Japan	*
Masatoshi Hiraishi	Graduate student	KEK	Japan	*
Masanori Miyazaki	Graduate student	KEK	Japan	*
Kotaro Saito	Graduate student	Tohoku University	Japan	*
Hiroshi Nakagawa	Researcher	JAEA	Japan	*
Kenji Kawashima	Postdoc	Aoyama Gakuin University	Japan	
Naoki Kase	Graduate student	Aoyama Gakuin University	Japan	
Hiroataka Okabe	Graduate student	Aoyama Gakuin University	Japan	
Naoki Ishikawa	Graduate student	Hokkaido University	Japan	
Yasuhiro Okusawa	Graduate student	Hokkaido University	Japan	
Kazumasa Horigane	Research associate	Tohoku University	Japan	*
Osamu Hashimoto	Professor	Tohoku University	Japan	Organizer etc.
Hirokazu Tamura	Professor	Tohoku University	Japan	Organizer etc.

Kazuyoshi Yamada	Professor	Tohoku University	Japan	Organizer etc.
Hiroyuki KURIHARA	Staff	J-PARC center	Japan	Organizer etc.
Yosuke Kazeoka	Staff	J-PARC center	Japan	Organizer etc.
Hiroshi Fukunishi	Director	JSPS Beijing office	China	Organizer etc.
Naomi Yoshizawa	Staff	JSPS	Japan	Organizer etc.
-China side				
Hongxia Zhang	Graduate student	ICCAS (Institute of Chemistry, CAS)	China	
Jiming Wang	Graduate student	ICCAS (Institute of Chemistry, CAS)	China	
Xia Dong	Associate professor	ICCAS (Institute of Chemistry, CAS)	China	
Haixia Wang	Graduate student	IOP (Institute of Physics)	China	
Xiande Peng	Graduate student	IOP (Institute of Physics)	China	
Na Fan	Graduate student	IOP (Institute of Physics)	China	
Jiangang Yu	Graduate student	IOP (Institute of Physics)	China	
Junrong Zhang	Graduate student	IOP (Institute of Physics)	China	
Jie Peng	Postdoctoral fellow	IHEP (Institute of High Energy Physics, CAS)	China	
Xingwang Zhu	Graduate student	IHEP (Institute of High Energy Physics, CAS)	China	
Kai Zhu	Postdoctoral fellow	IHEP (Institute of High Energy Physics, CAS)	China	
Jianping Dai	Graduate student	IHEP (Institute of High Energy Physics, CAS)	China	
Jiajun Wu	Graduate student	IHEP (Institute of High Energy Physics, CAS)	China	
Junhui Liao	Graduate student	IHEP (Institute of High Energy Physics, CAS)	China	
Zhijia Sun	Graduate student	IHEP (Institute of High Energy Physics, CAS)	China	
Juzhou Tao	Associate professor	IHEP (Institute of High Energy Physics, CAS)	China	
Hantao Jing	Associate professor	IHEP (Institute of High Energy Physics, CAS)	China	
Yingxia Wang	Associate professor	PKU (Pekin University)	China	
Guobao Li	Associate professor	PKU (Pekin University)	China	
Jie Su	Graduate student	PKU (Pekin University)	China	
Kuo Li	Graduate student	PKU (Pekin University)	China	
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Place a check [ \* ] in the Remark Column for those who participated using JSPS's seminar funding