

=====
The 34th Reimei Workshop
“Physics of Heavy-Ion Collisions at J-PARC”
--- The 2nd Circular ---

- 22 July 2016 -
=====

1. GENERAL ANNOUNCEMENT

The 34th Reimei Workshop “Physics of J-PARC Heavy-Ion Collisions” will be held on August 8th and 9th, 2016 in Tokai, Japan. There will also be informal discussions in Japanese for J-PARC-HI on August 10th.

We have just submitted the Letter-Of-Intent of J-PARC Heavy-Ion Program (J-PARC-HI) to J-PARC Program Advisory Committee. In this opportunity, we would like to hold a workshop on J-PARC-HI.

J-PARC-HI aims to find QCD phase structures in a high density regime, in particular, the critical point. Heavy-ion collisions at J-PARC-HI will create matter with 5-10 times the normal nuclear density.

For this purpose, J-PARC-HI will accelerate heavy-ion beams up to Uranium to 1-19 GeV/c per nucleon, corresponding to the nucleon-nucleon center-of-mass energy of 2-6.2 GeV. J-PARC-HI aims to achieve the world’s highest intensity heavy-ion beams of 10^{11} Hz utilizing the existing 3 GeV (RCS) and 50 GeV (MR) proton synchrotrons.

The main goals of this workshop are to discuss the status of J-PARC-HI, various physics and experimental possibilities, and to find the right direction to proceed with the project.

The topics of the workshop will be as follows.

1. J-PARC-HI status
2. Heavy-ion experiments in the world (NICA, FAIR, RHIC, and LHC)
3. QCD at high density and high temperature
4. Ongoing and planned J-PARC hadron/nuclear experiments

2. ORGANIZERS

Chair:

Hiroyuki Sako (ASRC/J-PARC, JAEA)

Advisory Board:

Shoji Nagamiya (RIKEN/JAEA/KEK), Kenichi Imai (ASRC, JAEA),
Michikazu Kinsho (J-PARC, JAEA), Makoto Oka (ASRC, JAEA / Tokyo Tech.)

Local Organizing Committee:

Tatsuya Chujo (Univ. of Tsukuba), Kazunori Itakura (J-PARC, KEK), Shoichi Hasegawa (ASRC/J-PARC, JAEA), Hiroyuki Harada (J-PARC, JAEA), Masakiyo Kitazawa (Osaka Univ. / KEK), Toshiki Maruyama (ASRC, JAEA), Kyoichiro Ozawa (J-PARC, KEK), Pranab Saha (J-PARC, JAEA), Takao Sakaguchi (BNL), Susumu Sato (ASRC/J-PARC, JAEA), Kiyoshi Tanida (ASRC, JAEA), Hitoshi Sugimura (ASRC, JAEA)

Host Institute:

Advanced Science Research Center, Japan Atomic Energy Agency

3. AGENDA

The tentative agenda for the workshop is as follows.

2016/8/8 Workshop First Day			
9:30–9:40	Greetings	S. Maekawa	JAEA
9:40–10:00	J-PARC status	N. Saito	J-PARC/KEK
10:00–10:30	J-PARC-HI Overview	H. Sako	JAEA
10:30–10:45	Break		
10:45–11:15	Accelerator Overview	H. Harada	JAEA
11:15–11:45	Recalling AGS	H. Hamagaki	Nagasaki IAS
11:45–12:15	Some topics in Hot and Dense matter in QCD	T. Kunihiro	Kyoto Univ
12:15–12:20	Photo Session		
12:20–13:40	Lunch		
13:40–14:10	NICA physics	D. Blaschke	Univ Wroscow
	Experiments with relativistic heavy ions at the	E. A.	
14:10–14:40	Nuclotron-NICA complex	Strokovsky	JINR

	The CBM experiment at FAIR and its Silicon		
14:40–15:10	Tracking System – status of development – Prospects for heavy flavour measurements with the	J. Heuser	GSI
15:10–15:40	ALICE inner tracker upgrade	M. Kweon	Inha Univ
15:40–16:10	Break		
16:10–16:40	Initial state fluctuations from SPS to LHC Mass modification of hadrons associated with partial	J. Milosevic	Univ Belgrade
16:40–17:10	chiral symmetry restoration in nuclear matter	M. Harada	Nagoya Univ
17:10–17:40	STAR–BES	D. Cebra	U.C. Davis
18:00–20:00	Banquet		

2016/8/9 Workshop Second Day

	Hadron–Hadron interaction from Femtosopic		
9:00–9:30	Correlation in Heavy Ion Collisions Modifications of meson spectral functions in nuclear	K. Morita	YITP Yonsei
9:30–10:00	matter Exploring EOS of NS matter by gravitational waves	P. Gubler	Univ
10:00–10:30	from NS binary	Y. Sekiguchi	Toho Univ
10:30–10:50	break		
10:50–11:20	J–PARC E16	K. Ozawa	KEK
11:20–11:50	J–PARC E50	H. Noumi	RCNP
11:50–12:40	Lunch		
12:40–14:00	J–PARC Tour (Hadron Experimental Facility)		
14:00–14:30	Hadron physics Directed flow in heavy–ion collisions as a probe of the	H. Ohnishi	RIKEN
14:30–14:50	first order phase transition	A. Ohnishi	YITP
14:50–15:10	D meson modification in finite density	T. Suenaga	Nagoya U
15:10–15:30	contributed talk 3	TBA	
15:30–15:40	break		
15:40–16:30	Collaborative discussion and Summary	H. Sako	

J–PARC–HI Informal Meeting (Discussions in

2016/8/10 Japanese)

9:00–9:30	Introduction and J–PARC–HI status	H. Sako	JAEA
9:30–10:00	Accelerator project for J–PARC–HI	H. Harada	JAEA
10:00–10:30	Hadron facility and MR for HI	K. H. Tanaka	KEK

10:30–10:50	break		
10:50–11:20	QCD physics at J-PARC-HI	T. Sakaguchi	BNL
11:20–11:40	Hadron physics at J-PARC-HI	H. Tamura	Tohoku Univ
11:40–12:10	Keywords for J-PARC-HI	M. Kitazawa	Osaka Univ
12:10–13:30	Lunch		
13:30–14:20	How to proceed with large accelerator projects	S. Nagamiya	RIKEN
14:20–14:50	Theoretical supports for RHIC	M. Asakawa	Osaka Univ
	Discussions in Nuclear Physics Committee		
14:50–15:10	for J-PARC-HI	K. Ozawa	KEK
15:10–15:30	break		
15:30–16:00	Theoretical supports for J-PARC-HI	A. Ohnishi	YITP, Kyoto Univ
16:00–17:00	How to proceed with J-PARC-HI	H. Sako	JAEA

We accept contributed talks in the afternoon session on Aug. 9, and there will also be a session for open discussions. Those who would like to present a contributed talk should apply in the registration form in the web page shown below.

4. INVITED SPEAKERS OF REIMEI WORKSHOP (confirmed)

- D. Blaschke (University of Wroclaw)
- D. Cebra (University of California, Davis)
- P. Gubler (Yonsei University)
- H. Hamagaki (Nagasaki Institute of Applied Science)
- H. Harada (J-PARC/Japan Atomic Energy Agency)
- M. Harada (Nagoya University)
- J. Heuser (GSI)
- T. Kunihiro (Kyoto University)
- M. Kweon (Inha University)
- J. Milosevic (University of Belgrade)
- K. Morita (YITP, Kyoto University)
- H. Noumi (RCNP, University of Osaka)
- H. Ohnishi (RIKEN, RCNP, University of Osaka)
- K. Ozawa (J-PARC/KEK)
- H. Sako (Japan Atomic Energy Agency)
- Y. Sekiguchi (Toho University)
- E.A. Stokovskiy (Joint Institute of Nuclear Research)

5. CONFERENCE VENUE

The workshop site is KEK Tokai Building 1, Room 116, whose address is;
203-1 Shirakata, Tokai-mura, Naka-gun, Ibaraki, 319-1195, JAPAN

6. ACCOMODATION

A limited number of rooms are reserved at J-PARC Tokai Dormitory and JAEA Masago International Lodging for the workshop near the venue. Participants should request a room in a registration form in the workshop web page. LOC will select one of the two dormitories for each participant.

7. J-PARC TOUR

We plan to have a J-PARC Tour for J-PARC Hadron Experimental Facility in the lunch time of Aug 9. Please check your participation in the registration form.

NOTE: During the tour, please bring your passport with you (foreign participants), and bring one or two of the following ID's (Japanese participants) in order to enter J-PARC site.

ID's required for Japanese participants to enter J-PARC cite:

- ・運転免許証またはパスポート

または

- ・住民基本台帳カード（写真なし）、住民票、健康保険証、年金手帳、学生証い
ずれか2種類

8. REGISTRATION

Registration fee is about 1,000 JPY. **The deadline of registration was extended to July 31.** Registration form is in the web page

9. BANQUET

Banquet is planned in Aug 8 evening. The cost is about 5,000 JPY. Please check your participation in the registration form.

10. LUNCH

Since only a few restaurants are around the venue, we prepare for lunch boxes. The cost per lunch box will be about 1,000 JPY. Please reserve it in the registration form.

11. WORKSHOP WEB PAGE

For information on registration and further details, please refer to the web page;
<http://asrc.jaea.go.jp/soshiki/gr/hadron/workshop/reimei-34th/>

We look forward to seeing you in Tokai.

For the workshop organizers Hiroyuki Sako