

Japan-Korea Workshop on Physics and Technology of Heating and Current Drive

Date : Feb. 17-18, 2025

Venue : Room 801 Building No1. National Institute for Fusion Science

After registration at the website, the Zoom address is sent to participants)

Website: <https://indico.nifs.ac.jp/event/28/>

Program (17th Feb.)

10:15 – 10:45	Registration (Room 801, Building 1)	0:30
10:45 – 10:55	Opening Hiroe Igami (NIFS)	0:10

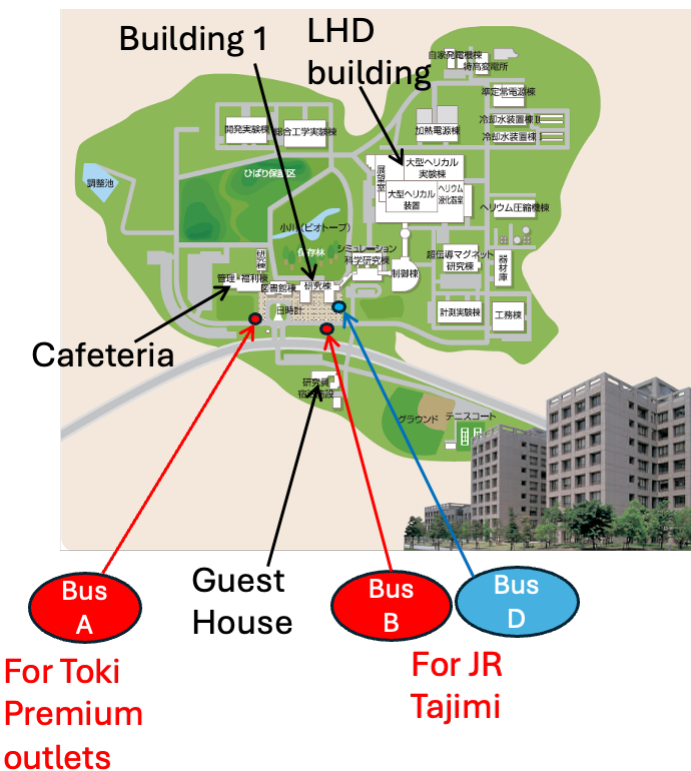
Session 1	Chair: Sonjong Wang (KFE)	
1-1 10:55 – 11:20	“Status of LHD ECH system for next campaign and related topics” Masaki Nishiura (NIFS)	0:25
1-2 11:20 – 11:45	“Study of Microwave Transmission Mode Content in KSTAR ECH transmission line from Measured Field Intensity” Ajay Kumar Pandey (KFE). -online-	0:25
1-3 11:45 – 12:10	“Effect of vertical space of vacuum vessel on formation of closed flux surfaces by ECH” Masaki Uchida (Kyoto Univ.) -online-	
12:10 – 13:15	Lunch Time	1:05

Session 2	Chair: Hiroe Igami (NIFS)	
2-1 13:15 – 13:40	“Recent activity in dual frequency (142/208 GHz) gyrotron development and transmission line system” EunMi Choi (UNIST)	0:25
2-2 13:40 – 14:05	“External magnetic field effect and correction coil design for the ITER gyrotrons” Satoru Yajima (QST)	0:25
2-3 14:05 – 14:30	“Non-inductive plasma ramp-up using 8.56 GHz ECH system on QUEST” Takahiro Yamaguchi (Kyushu Univ.)	0:25

2-4 14:30– 14:55	“Result of ECRH Operation in the integrated commissioning phase and the progress towards the initial research phase on the JT-60SA” Hibiki Yamazaki (QST)	0:25
14:55 – 15:15	Break	0:20

Session 3	Chair: Masaki Nishiura (NIFS)	
3-1 15:15 – 15:40	“Status and recent experimental results of KSTAR NBI system” SeulChan Hong (KFE). -online-	0:25
3-2 15:40 – 16:05	“Negative Ion Production Characteristics of Two-Region Arc Plasma (TRAP) Ion Source” Kihyun Lee (KAERI). -online-	0:25
3-3 16:05 – 16:30	“Oscillation of negative ion beamlet and effect on beam focusing for negative-NBI” Kenichi Nagaoka (NIFS)	0:25
3-4 16:30 – 16:55	“Study of Beam Trajectory in KSTAR Neutral Beam Injector using Beamlet-Based Model” Byoung Seung Kim -online-	0:25
Workshop Dinner near JR Tajimi station		

Bus from NIFS to JR Tajimi station directly departs at 17:25 from Bus stop D



Program (18th Feb.)

Session 4-1	Chair: EunMi Choi (UNIST)	
4-1-1 9:30 – 9:55	“Hybrid simulation of Alfvén Eigenmodes due to multiple fast ions in the Large Helical Device” Ryosuke Seki (NIFS)	0:25
4-1-2 9:55 – 10:20	“Simultaneous Estimation of Edge Plasma Density Profiles and Heating Beam Properties via Bayesian Inference and Gaussian Process Regression in the KSTAR H-BES System” Jaewook Kim (KFE)	0:25
4-1-3 10:20 – 10:45	“Estimation of Electron Cyclotron Plasma Heating Profiles Based on Ray Tracing Simulation Data” Jiho Park (KFE) -online-	0:25
10:45 – 11:05	Break	0:20

Session 4-2	Chair: Naoto Tsujii (Univ. Tokyo)	
4-2-1 11:05 -11:30	“Kinetic full wave analysis of electron cyclotron waves using integral form of dielectric tensor” Atsushi Fukuyama (Kyoto Univ.)	0:25
4-2-2 11:30 -11:55	“Observation of non-thermal RF radiations excited during external heating” Hiroe Igami (NIFS)	0:25
11:55 – 13:00	Lunch Time	1:05

Session 6	Chair: Tetsuo Seki (NIFS)	
5-1 13:00 – 13:25	“Non-inductive start-up experiment with various lower-hybrid launch scenarios on TST-2” Naoto Tsujii (Univ. Tokyo)	0:25
5-2 13:25 – 13:50	“Development of a Lower Hybrid Fast Wave Antenna and Low Power Coupling in KSTAR Plasmas” Jong Gab Jo (KAERI) -online-	0:25
5-3 13:50 – 14:15	“Report on the helicon current drive in KSTAR and the expected performance in Korean DEMO reactor” Sonjong Wang (KFE)	0:25
14:15 – 14:30	Closing	0:15

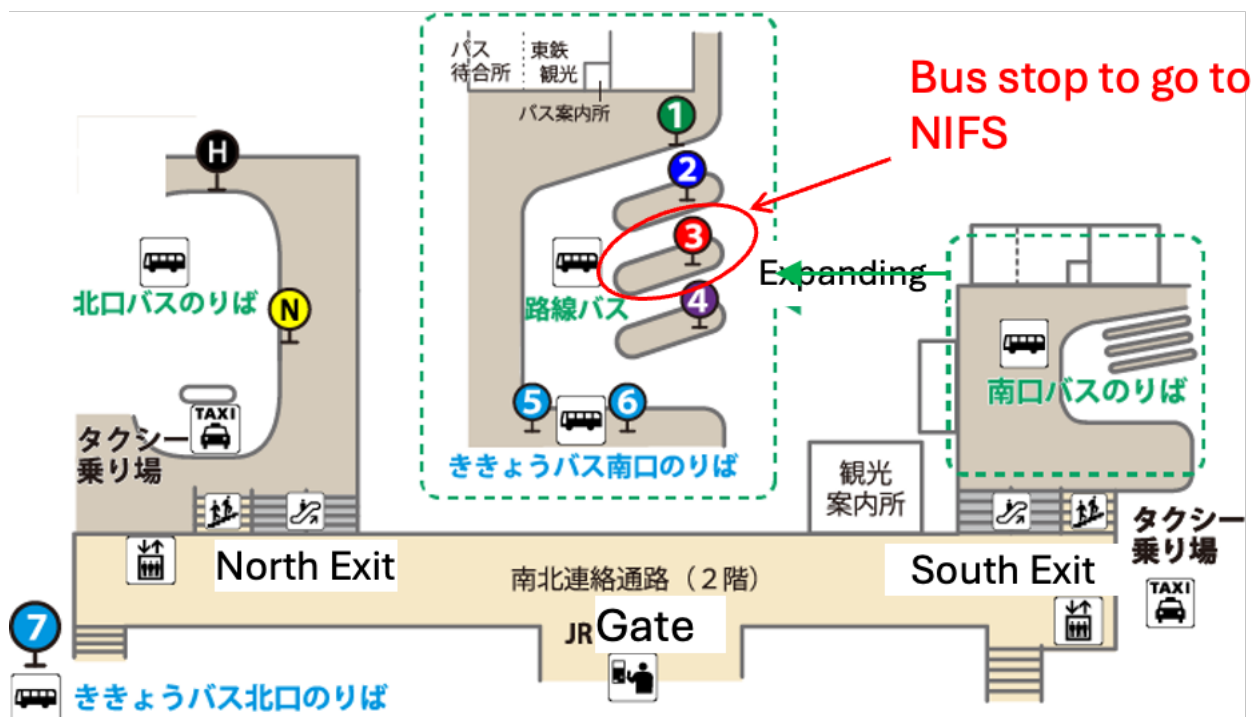
14:30 – 15:30	Tour: LHD experiment hall & heating equipment room	1:00
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How to get to NIFS from JR Tajimi station

JR Tajimi station, **South Exit, Bus stop No.3**

Destination :

核融合科学研究所(National Institute for Fusion Science), or 土岐プレミアムアウトレット (Toki Premium Outlets)



Get off the bus at: **核融合科学研究所**
(National Institute for Fusion science)

No English announce in the bus

Take a bus or a taxi.

Bus timetable

Weekday			
Towards Kenkyu-Gakuen-Toshi Center or Toki Premium Outlets		Towards JR Tajimi Station	
Departs at JR Tajimi Sta.	Arrives at NIFS	Departs at NIFS	Arrives at JR Tajimi Sta.
*8:07	8:24	8:06	8:28
8:30	8:50	8:30	8:52
9:25	9:45	9:14	9:33
10:10	10:30	9:54	10:13
10:40	11:00	10:09	10:28
11:10	11:30	10:19	10:38
12:10	12:30	10:54	11:13
13:10	13:30	11:24	11:43
14:10	14:30	11:54	12:13
15:10	15:30	12:54	13:13
16:10	16:30	13:54	14:13
16:55	17:15	14:54	15:13
17:10	17:30	15:54	16:13
17:55	18:15	16:54	17:16
18:15	18:35	*17:25	17:45
18:40	19:00	17:54	18:16
19:55	20:15	*18:22	18:42
		18:59	19:18
		*19:23	19:40
		20:59	21:18

Weekend/Public holidays			
Towards Toki Premium Outlets		Towards JR Tajimi Sta.	
Departs at JR Tajimi Sta.	Arrives at NIFS	Departs at NIFS	Arrives at JR Tajimi Sta.
9:15	9:35	9:29	9:48
10:10	10:30	9:59	10:18
10:40	11:00	10:24	10:43
11:10	11:30	10:54	11:13
12:10	12:30	11:54	12:13
13:10	13:30	12:54	13:13
14:10	14:30	13:54	14:13
15:10	15:30	14:54	15:13
16:10	16:30	15:54	16:13
17:10	17:30	16:54	17:13
18:20	18:40	17:54	18:13
19:20	19:40	19:04	19:23
20:50	21:20	20:04	20:23

asterisks (*) refers to non-stop buses.

Wait at the bus stop inside NIFS
 Wait at the bus stop on the street outside NIFS

Updated on October 7, 2024

**There is no bus service on the following dates: 12/29-1/3 and 8/13-8/15.

NIFS

WS dinner. 17th Feb. 2025

Venue: Okinawa bar “Mifaiyu” (沖縄酒場みーふあいゆうー), near JR Tajimi station

Time : 18:00 -

Fee: ¥4000(Students), ¥7000(Others)



How to get back to NIFS guest house

- The final bus for NIFS from Tajimi station
19:55 –
- Sharing a taxi from Tajimi station (~ ¥3000, maximum four people) + a car (maximum 2 people)