LHD project

Daily Schedule

Prepared by
Y.Takemura

Date	Experimental Subject
2024/4/18(Thu)	Collisionality dependence of shielding threshold of external RMP Calibration of Solar EUV Spectrometers, Transport analysis of heavy impurity ions, Impact of turbulence reduction via boron injection

Exp. No.	Experimental Session Group	Session Coordinator
1351	IA/MAP	C.Suzuki[2255] / M.Kobayashi[2169] Y.Takemura[2167] / N.Kenmochi[2208]

Time Table

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	UP	[IA]		[MAP]					DN					

Details and Experimental Conditions

Gas

[IA](10:30 ～ 12:15) ECH, NBI
10:30-12:15 Collisionality dependence of shielding threshold of external RMP (Y. Takemura)
0.9T→0.75T
#including NBI calibration shots

Sequence:3min

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CW	3.6	0.9	1.129	100.0	
2		CW	3.6	0.75	1.129	100.0	
3	✓	CW	3.6	0.5	1.129	100.0	

Gas: H2

[MAP](12:15 ～ 16:45) ECH, NBI
12:15-12:25 [Change of Mag. Config.: 3.6m, 0.75T -> 3.9m, 1.0T]
12:25-12:55 Calibration of Solar EUV Spectrometers and Validation of Diagnostic Capability for Solar High-Temperature Plasmas by LHD Experiments (H. Hara (NAOJ), I. Murakami)
12:55-13:00 NBI calibration (1 shot)
13:00-13:35 [Change of Mag. Config.: 3.9m, 1.0T -> 3.75m, 2.64T]
13:35-15:20 Transport analysis of heavy impurity ions in core plasma (S. Satake)
15:20-15:30 NBI calibration (3 shots)
15:30-15:45 [Change of Mag. Config.: 3.75m, 2.64T -> 3.6m, 2.75T]
15:45-16:45 Study of the impact of turbulence reduction via boron injection on impurity confinement and transport (D. M. Roque (Ciemat), N. Tamura)
including NBI calibration 1 shot

Sequence:3min

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CW	3.9	1.0	1.2538	100.0	
2		CW	3.75	2.64	1.2538	100.0	
3		CW	3.6	2.75	1.2538	100.0	

Gas: H2,He,Ar

Wall Conditioning

GD(Before Exp.): H2 , GD(After Exp.): He , Cryopump(During Exp.): on

Remarks

(IA)CXS, FTS, LID(10:30-12:15)

(MAP)TESPEL, CXS, HIBP, impurity pellet(W), Spectrometers, PCI, CECE

【Precautions for today's LHD experiments】
(id:723) Impurity pellet/TESPEL
(id:724) Impurity gas puff
(id:731) Mag. Conf.: Using LID coil
(id:738) Mag. Conf.: Exp. with low gamma (Combined)
(id:752) NBI: Injection into the discharges with low fields
(id:762) Impurity powder dropper