LHD project

Daily Schedule

Prepared by
N.Tamura

Date	Experimental Subject
2022/12/14(Wed)	Ablation of solid hydrogen pellet and particle fueling He density profile in mixture plasmas, Impurity control in 3D devices, Z-Dependence transport study, Mixture induced phase transition

Exp. No.	Topical Group	TGL	Sub-TGL
1320	instability/multi-ion	K.Nagaoka/Y.Takemura N.Tamura/M.Kobayashi [2177/2167, 2337/2169]	R.Seki/N.Kenmochi H.Kasahara/G.Motojima [2201/2208, 2203/2142]

Time Table

8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	UP	[instability]		[multi-ion]							DN			

Details and Experimental Conditions	Gas
[instability Coordinator: NaokiKenmochi](09:45 ～ 11:45) ECH, NBI 09:45-11:45 Study on ablation of solid hydrogen pellet and particle fueling (X. Dai, R. Sakamoto) Maximum number of discharges : 70 Sequence:3min	H2,Ar
[multi-ion Coordinator: M.Kobayashi](11:45 ～ 18:45) ECH, NBI, ICH 11:45-13:45 He density profile in mixture plasmas (I.C. Chan, H. Yamada) 13:45-15:30 Impurity control in 3D devices by sawtooth instability (D. Moseev, Kasahara) 15:30-17:15 Z-dependence of Impurity transport in turbulent-reduced plasmas (D.M. Roque, Tamura) 17:15-17:30 Mag config change 17:30-18:45 Multi-ion induced phase transition (A. Dinklage, Tamura) Maximum number of discharges : 150 Sequence:3min	H2,He,Ar

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CCW	3.6	1.375	1.2538	100.0	

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CCW	3.6	1.375	1.2538	100.0	
2		CCW	3.6	2.75	1.2538	100.0	
3		CCW	3.9	2.5385	1.2538	100.0	

Wall Conditioning

GD(Before Exp.): None , GD(After Exp.): None , Cryopump(During Exp.): on

Remarks

(instability)H pellet injection is indispenasble.

(multi-ion)ECCD, ECH off-axis, H Pellet injection, CXRS (Ion temp, Er, H/D/He/Ar ion density measurement [CXSn, CXS8 should be with NBI#5]), ECE, PCI, ICE, TESPEL(Ti & TBD), SOXMOS, EUV/VUV spectrometers

【Precautions for today's LHD experiments】
(id:676) Impurity pellet/TESPEL
(id:677) Impurity gas puff
(id:687) High plasma current exp. (100 kA =< Ip < 150kA) (Combined)
(id:705) ECH: off-axis injection (Combined)
(id:706) ICH: Antennae insertion for plasma heating by ICH : Subcool required
(id:720) Probe: Edge plasma measurement using the fast-scanning Langmuir probes
(id:722) Insertion of sample, etc: Insertion of water-cooled tungsten divertor test piece