LHD project

Daily Schedule

Prepared by
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Date	Experimental Subject
2021/10/22(Fri)	Study on Ion Distribution toward low magnetic-field operations Ion Distribution toward low magnetic-field operations, Impurity transport, Exposure of material (W-alloys) samples

Exp. No.	Topical Group	TGL	Sub-TGL
1221	spectroscopy/multi-ion	M. Goto N.Tamura/M.Kobayashi [2290, 2337/2169]	M.Yoshinuma/T.Oishi/T.Kawate H.Kasahara/G.Motojima [2172/2022/, 2065/2142]

Time Table

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

Details and Experimental Conditions	Gas
[spectroscopy](09:15 ～ 11:45)ECH, NBI Study on Ion Distribution toward low magnetic-field operations Maximum number of discharges : 60 Sequence:3min	H2
[multi-ion](11:45 ～ 18:45)ECH, NBI, ICH Study on Ion Distribution toward low magnetic-field operations Impurity transport study for the electron-root and ion-root regimes (Hydrogen) Exposure of material (W-alloys) samples into the edge plasma by means of the LHD manipulator Expansion of the observable charge state range of tungsten ions (proposal in TG3[spectroscopy]) Maximum number of discharges : 150 Sequence:3min	H2,He

[spectroscopy]

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CCW	3.6	0.458	1.2538	100.0	
2		CCW	3.6	0.6875	1.2538	100.0	
3	✓	CCW	3.6	1.0	1.2538	100.0	
4	✓	CCW	3.6	1.375	1.2538	100.0	

[multi-ion]

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CCW	3.6	2.75	1.2538	100.0	

Wall Conditioning

GD(Before Exp.): No , Cryopump(During Exp.): Yes

Remarks

(spectroscopy)56GHz ECH used for low magnetic field.
【Precautions for today's LHD experiments】
(id:612) Impurity pellet/TESPEL
(id:620) ECH: Low absorption condition
(id:638) ECH: Commissioning (alignment, profile check)
(id:654) ECH: Injection from the antenna at Port 1.5Uo
(id:657) ICH: Antennae insertion for plasma heating by ICH
(id:664) Exposure of W-alloy samples to divertor plasma
(id:668) NB injection for low field discharges