

23rd 1st week(10/11/21 - 10/15/21) schedule for LHD experiment

Weekly report :

Date	Day of the week	Bt direction	Wall condition (mor)	Schedule of the day			Wall conditioning (night)	Gas	Experiment implementation system	Remark																																							
				Morning (～ 12:15)		Afternoon (12:15 ～ 18:45)																																											
10/11	Mo.																																																
10/12	Tu.																																																
10/13	We.																																																
10/14	Th.	CCW		[multi-ion](11:00 ～ 18:45)ECH, NBI, ICH Device commissioning, Material sample exposure, ECH alignment, Pressure gauge <table><tr><th>#</th><th>Opt.</th><th>Pol.</th><th>Rax</th><th>Bax</th><th>gamma</th><th>Bq</th><th>SC</th></tr><tr><td>1</td><td></td><td>CCW</td><td>3.6</td><td>2.75</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>2</td><td>✓</td><td>CCW</td><td>3.75</td><td>2.64</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>3</td><td>✓</td><td>CCW</td><td>3.55</td><td>2.7887</td><td>1.2538</td><td>100.0</td><td></td></tr></table>			#	Opt.	Pol.	Rax	Bax	gamma	Bq	SC	1		CCW	3.6	2.75	1.2538	100.0		2	✓	CCW	3.75	2.64	1.2538	100.0		3	✓	CCW	3.55	2.7887	1.2538	100.0		None	H2, D2, He, N2, Ne, Ar, Kr, Xe [Responsible person] K.Ida / N.Tamura [ECH] Kenmochi [NBI] Nakano [central ctrl./data proc.] Ohsuna/Maeno, Yasui [radiation] Kobuchi [EXP LAN] Yamamoto/Nakamura [TGL] N.Tamura/M.Kobayashi [SubTGL] H.Kasahara/G.Motojima	(multi-ion)Sample Manipulator (10.5L) (id:612) Impurity pellet/TESPEL (id:613) impurity gas puff (id:614) Impurity powder dropper (id:615) High Pressure Pulse Operation (id:620) ECH: Low absorption condition (id:627) Use of Fast Ion Loss Diagnostics (8-O) (id:629) HDLP Probe access near LCFS (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								
#	Opt.	Pol.	Rax	Bax	gamma	Bq	SC																																										
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10/15	Fr.	CCW		[multi-ion](11:00 ～ 18:45)ECH, NBI, ICH Impurity shielding, Device commissioning, Reference discharge <table><tr><th>#</th><th>Opt.</th><th>Pol.</th><th>Rax</th><th>Bax</th><th>gamma</th><th>Bq</th><th>SC</th></tr><tr><td>1</td><td></td><td>CW</td><td>3.6</td><td>1.0</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>2</td><td></td><td>CW</td><td>3.6</td><td>2.75</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>3</td><td></td><td>CW</td><td>3.75</td><td>2.64</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>4</td><td></td><td>CW</td><td>3.9</td><td>2.5384</td><td>1.2538</td><td>100.0</td><td></td></tr></table>			#	Opt.	Pol.	Rax	Bax	gamma	Bq	SC	1		CW	3.6	1.0	1.2538	100.0		2		CW	3.6	2.75	1.2538	100.0		3		CW	3.75	2.64	1.2538	100.0		4		CW	3.9	2.5384	1.2538	100.0		Div Cryo	H2, D2, He, N2, Ne, Ar, Kr, Xe [Responsible person] M.Osakabe / M.Kobayashi [ECH] Yanai [NBI] Nuga [central ctrl./data proc.] Maeno/Ogawa, Yasui [radiation] Miyake [EXP LAN] Inoue/Watanabe [TGL] N.Tamura/M.Kobayashi [SubTGL] H.Kasahara/G.Motojima	(multi-ion)IPD(B), Special gas-puff modulation (id:612) Impurity pellet/TESPEL (id:613) impurity gas puff (id:614) Impurity powder dropper (id:615) High Pressure Pulse Operation (id:620) ECH: Low absorption condition (id:629) HDLP Probe access near LCFS (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
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Daily Schedule

Prepared by

H.Kasahara

Date	Experimental Subject																																										
2021/10/14(Thu)	Device commissioning, Material sample exposure, ECH alignment, Pressure gauge																																										
Exp. No.	Topical Group				TGL				Sub-TGL																																		
1216	multi-ion				N.Tamura/M.Kobayashi [2337/2169]				H.Kasahara/G.Motojima [2065/2142]																																		
Time Table	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22																												
		U P		[multi-ion]								D N																															
Details and Experimental Conditions														Gas																													
[multi-ion](11:00 ~ 18:45)ECH, NBI, ICH Commissioning (Helium) Exposure of material (W-alloys) samples into the edge plasma by means of the LHD manipulator (C.P. Dhard, S. Masuzaki) ECH alignment (R. Yanai) Performance of new pressure gauges of the ITER type (U. Wenzel, G. Motojima) Maximum number of discharges : 170 Sequence:3min <table><tr><td>Reserved</td><td>Polarity</td><td>Rax(m)</td><td>Bax(T)</td><td>gamma</td><td>Bq(%)</td><td>Subcooled</td></tr><tr><td>No</td><td>CCW</td><td>3.6</td><td>2.75</td><td>1.2538</td><td>100.0</td><td>No</td></tr><tr><td>Yes</td><td>CCW</td><td>3.75</td><td>2.64</td><td>1.2538</td><td>100.0</td><td>No</td></tr><tr><td>Yes</td><td>CCW</td><td>3.55</td><td>2.7887</td><td>1.2538</td><td>100.0</td><td>No</td></tr></table>														Reserved	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	No	CCW	3.6	2.75	1.2538	100.0	No	Yes	CCW	3.75	2.64	1.2538	100.0	No	Yes	CCW	3.55	2.7887	1.2538	100.0	No	H2,D2,He ,N2,Ne,Ar ,Kr,Xe	
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Wall Conditioning		GD(Before Exp.): No , Cryopump(During Exp.): No																																									
Remarks		(multi-ion)Sample Manipulator (10.5L) 【LHD experiment manual with precautions】 (id:612) 不純物:ペレット/TESPEL (id:613) 不純物:ガスパフ (id:614) 不純物: パウダードロップ (id:615) 高ガス圧パルス (id:620) ECH: 低吸収運転 (id:627) プローブ:8-O高エネルギーイオン損失の挿入 (id:629) プローブ:HDLPのLCFSへの挿入 (id:638) ECH: アライメント・分布計測 (id:654) ECH:新1.5-UOアンテナ入射 (id:657) ICH: 電力入射のためのアンテナ挿入(まとめ) (id:664) 試料駆動装置:W合金試料のダイバータプラズマへの曝露																																									

Daily Schedule

Prepared by

H.Kasahara

Date	Experimental Subject																																																	
2021/10/15(Fri)	Impurity shielding, Device commissioning, Reference discharge																																																	
Exp. No.	Topical Group				TGL				Sub-TGL																																									
1217	multi-ion				N.Tamura/M.Kobayashi [2337/2169]				H.Kasahara/G.Motojima [2065/2142]																																									
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Details and Experimental Conditions														Gas																																				
[multi-ion](11:00 ~ 18:45)ECH, NBI, ICH 56 GHz ECH commissioning (R. Yanai) The impurity shielding performance of the ergodic layer by a systematic scan of the dust dropping rate using the Impurity Powder Dropper (IPD(B)) will be investigated (M. Shoji). Test of a non-sinusoidal multi-freq. density modulation (M. van Berkel, K. Tanaka). Device commissioning will be conducted. A reference discharge at each magnetic field configuration will be carried out. Maximum number of discharges : 170 Sequence:3min <table><thead><tr><th>Reserved</th><th>Polarity</th><th>Rax(m)</th><th>Bax(T)</th><th>gamma</th><th>Bq(%)</th><th>Subcooled</th></tr></thead><tbody><tr><td>No</td><td>CW</td><td>3.6</td><td>1.0</td><td>1.2538</td><td>100.0</td><td>No</td></tr><tr><td>No</td><td>CW</td><td>3.6</td><td>2.75</td><td>1.2538</td><td>100.0</td><td>No</td></tr><tr><td>No</td><td>CW</td><td>3.75</td><td>2.64</td><td>1.2538</td><td>100.0</td><td>No</td></tr><tr><td>No</td><td>CW</td><td>3.9</td><td>2.5384</td><td>1.2538</td><td>100.0</td><td>No</td></tr></tbody></table>														Reserved	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	No	CW	3.6	1.0	1.2538	100.0	No	No	CW	3.6	2.75	1.2538	100.0	No	No	CW	3.75	2.64	1.2538	100.0	No	No	CW	3.9	2.5384	1.2538	100.0	No	H2,D2,He ,N2,Ne,Ar ,Kr,Xe	
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Remarks		Divertor Cryo (except for 2I) (multi-ion)IPD(B), Special gas-puff modulation 【LHD experiment manual with precautions】 (id:612) 不純物:ペレット/TESPEL (id:613) 不純物:ガスパフ (id:614) 不純物:パウダードロップ (id:615) 高ガス圧パルス (id:620) ECH: 低吸収運転 (id:629) プローブ:HDLPのLCFSへの挿入 (id:638) ECH: アライメント・分布計測 (id:654) ECH:新1.5-UOアンテナ入射 (id:657) ICH: 電力入射のためのアンテナ挿入(まとめ)																																																