

23rd 5th week(11/08/21 - 11/12/21) schedule for LHD experiment

Weekly report : H.Takahashi

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)									
11/8	Mo.																		
11/9	Tu.	CCW		[instability](09:00 ～ 16:00)ECH, NBI, ICH Non-linear Coulomb collision effect, Knock-on tail formation, Rational surface on L-H transition # Opt. Pol. Rax Bax gamma Bq SC 1 CCW 3.55 2.7887 1.2538 100.0 2 CCW 3.6 2.75 1.2538 100.0 3 CCW 3.55 1.0 1.2538 100.0 4 CCW 3.6 1.0 1.2538 100.0 5 CCW 3.75 1.0 1.2538 100.0 6 CCW 3.9 1.0 1.2538 100.0						[turbulence](16:00 ～ 18:45)ECH, NBI, ICH Turbulence suppression with boron powder injection, Electromagnetic turbulence in high beta plasmas. # Opt. Pol. Rax Bax gamma Bq SC 1 CCW 3.55 2.7887 1.2538 100.0 2 CCW 3.6 2.75 1.2538 100.0 3 CCW 3.55 1.0 1.2538 100.0 4 CCW 3.6 1.0 1.2538 100.0 5 CCW 3.75 1.0 1.2538 100.0 6 CCW 3.9 1.0 1.2538 100.0						Div Cryo	H2, D2, He, Ar	[Responsible person] M.Osakabe / M.Kobayashi [ECH] Yoshimura [NBI] Ikeda [central ctrl./data proc.] Ohsuna/Maeno, Yasui [radiation] Hayashi [EXP LAN] Nakamura/Yamamoto [TGL] K.Nagaoka/Y.Takemura, T.Tokuzawa [SubTGL] S.Kamio/N.Kenmochi, T.Kobayashi/T.Tsujimura/M.Nakata	(instability)CNPA, DNPA, E B NPA, fast TS, FIDA, Impurity CXS (Li, B, C), Impurity pellet injection, ICH DC, Div cryopump (except for 2-I section) (turbulence)CNPA, DNPA, E B NPA, fast TS, FIDA, Impurity CXS (Li, B, C), Impurity pellet injection, ICH DC, Div cryopump (except for 2-I section) (id:614) Impurity powder dropper (id:617) Mag. Conf.: Rax = 3.55 - 3.599 m (id:626) Mag. Conf.: Using LID coil (id:632) Li pellet injection by impurity pellet injector (id:655) ECH: Power injection for more than 10 s (id:657) ICH: Antennae insertion for plasma heating by ICH (id:663) Impurity: (Li, B4C, C) powder
11/10	We.	CCW														Div Cryo		[Responsible person] R.Sakamoto / T.Tokuzawa [ECH] Tsujimura [NBI] Kamio [central ctrl./data proc.] Ohsuna/Maeno, Yasui [radiation] Kobuchi [EXP LAN] Inoue/Watanabe [TGL] [SubTGL]	
11/11	Th.	CCW														Div Cryo		[Responsible person] M.Isobe / M. Goto [ECH] Kenmochi [NBI] Nakano [central ctrl./data proc.] Ohsuna/Maeno, Yasui [radiation] Miyake [EXP LAN] Yamamoto/Inoue [TGL] [SubTGL]	
11/12	Fr.	CCW														None		[Responsible person] S.Masuzaki / Y.Takemura [ECH] Yanai [NBI] Nuga [central ctrl./data proc.] Ohsuna/Maeno, Yasui [radiation] Tanaka [EXP LAN] Nakamura/Watanabe [TGL] [SubTGL]	

Daily Schedule

Prepared by

S.Kamio
T.Kobayashi

Date	Experimental Subject																
2021/11/9(Tue)	Non-linear Coulomb collision effect, Knock-on tail formation, Rational surface on L-H transition Turbulence suppression with boron powder injection, Electromagnetic turbulence in high beta plasmas.																
Exp. No.	Topical Group						TGL					Sub-TGL					
1229	instability/turbulence						K.Nagaoka/Y.Takemura T.Tokuzawa [2177/2167, 2217]					S.Kamio/N.Kenmochi T.Kobayashi/T.Tsujimura/M.Nakata [2194/2208, 2231/2023/2276]					
Time Table	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		
		U P	[instability]						[turbulence]			D N					
Details and Experimental Conditions															Gas		
[instability](09:00 ~ 16:00)ECH, NBI, ICH Experimental analysis of the non-linear Coulomb collision effect, Observation of knock-on tail formation using DD neutrons and 6LiD γ-rays, Impacts of rational surface on L-H transition in high beta plasma Maximum number of discharges : 170 Sequence:3min															H2,D2,He ,Ar		
#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled										
1		CCW	3.55	2.7887	1.2538	100.0											
2		CCW	3.6	2.75	1.2538	100.0											
3		CCW	3.55	1.0	1.2538	100.0											
4		CCW	3.6	1.0	1.2538	100.0											
5		CCW	3.75	1.0	1.2538	100.0											
6		CCW	3.9	1.0	1.2538	100.0											
[turbulence](16:00 ~ 18:45)ECH, NBI, ICH Turbulence suppression with boron powder injection, Electromagnetic turbulence in high beta plasmas. Maximum number of discharges : 170 Sequence:3min															H2,D2,He ,Ar		
#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled										
1		CCW	3.55	2.7887	1.2538	100.0											
2		CCW	3.6	2.75	1.2538	100.0											
3		CCW	3.55	1.0	1.2538	100.0											
4		CCW	3.6	1.0	1.2538	100.0											
5		CCW	3.75	1.0	1.2538	100.0											
6		CCW	3.9	1.0	1.2538	100.0											
Wall Conditioning																	
GD(Before Exp.): D2 , Cryopump(During Exp.): Yes																	
Remarks																	
(instability)CNPA, DNPA, E B NPA, fast TS, FIDA, Impurity CXS (Li, B, C), Impurity pellet injection, ICH DC, Div cryopump (except for 2-I section) (turbulence)CNPA, DNPA, E B NPA, fast TS, FIDA, Impurity CXS (Li, B, C), Impurity pellet injection, ICH DC, Div cryopump (except for 2-I section) 【Precautions for today's LHD experiments】 (id:614) Impurity powder dropper (id:617) Mag. Conf.: Rax = 3.55 - 3.599 m (id:626) Mag. Conf.: Using LID coil (id:632) Li pellet injection by impurity pellet injector (id:655) ECH: Power injection for more than 10 s (id:657) ICH: Antennae insertion for plasma heating by ICH (id:663) Impurity: (Li, B4C, C) powder dropping (id:668) NB injection for low field discharges																	

Daily Schedule

Prepared by

Date	Experimental Subject														
2021/11/10(Wed)															
Exp. No.	Topical Group					TGL					Sub-TGL				
1230															
Time Table	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		U P										D N			
Details and Experimental Conditions														Gas	
Wall Conditioning	GD(Before Exp.): No , Cryopump(During Exp.): Yes														
Remarks															

Daily Schedule

Prepared by

Date	Experimental Subject														
2021/11/11(Thu)															
Exp. No.	Topical Group					TGL					Sub-TGL				
1231															
Time Table	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		U P										D N			
Details and Experimental Conditions														Gas	
Wall Conditioning	GD(Before Exp.): No , Cryopump(During Exp.): Yes														
Remarks															

Daily Schedule

Prepared by

Date	Experimental Subject														
2021/11/12(Fri)															
Exp. No.	Topical Group					TGL					Sub-TGL				
1232															
Time Table	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		U P										D N			
Details and Experimental Conditions														Gas	
Wall Conditioning	GD(Before Exp.): No , Cryopump(During Exp.): No														
Remarks															