

LHD project

Daily Schedule

Prepared by

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Date	Experimental Subject																						
Exp. No.	Topical Group			TGL				Sub-TGL															
2022/12/15(Thu)	Fast-Ion Stiffness, Sawtooth Corralation between density fluctuation and magnetic fluctuation in high-beta plasma HIBP experiment							R.Seki/N.Kenmochi A.Shimizu/T.Kobayashi/M.Nishiura/M.Nakata [2201/2208, 2454/2231/2184/2276]															
1321	instability/turbulence			K.Nagaoka/Y.Takemura T.Tokuzawa [2177/2167, 2217]					8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Time Table	U P	[instability]				[turbulence]				[instability]	D N												

Details and Experimental Conditions

Gas

[instability Coordinator: Takemura](09:30 ~ 14:45) ECH, NBI
9:45-11:15 Study of Fast-Ion Stiffness in Alven-Eigenmode at Helical Device (Kamio)
11:15-11:45 change configuration
11:45-14:45 Characteristics of sawtooth-like oscillation (Takemura)

H2,Ar

Maximum number of discharges : 110
Sequence:3min

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CW	3.6	1.0	1.2538	100.0	
2		CW	3.6	1.375	1.2538	100.0	
3		CW	3.6	0.75	1.129	100.0	
4	✓	CW	3.6	0.75	1.2538	100.0	
5	✓	CW	3.6	0.6	1.129	100.0	

[turbulence Coordinator: T.Kobayashi](14:45 ~ 17:00) ECH, NBI
15:05-16:35: Corralation between density fluctuation and magnetic fluctuation in high-beta plasma (T. Kinoshita, K. Tanaka)

H2

Maximum number of discharges : 60
Sequence:3min

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CW	3.6	1.375	1.2538	100.0	
2	✓	CW	3.6	1.7	1.2538	100.0	
3	✓	CW	3.6	1.5	1.2538	100.0	

[instability Coordinator: Takemura](17:00 ~ 18:45) ECH, NBI
17:00-18:45 Spatial structures of density, electric potential and density fluctuations in the core region during perpendicular NBI (Ido)

H2,Ar

Maximum number of discharges : 60
Sequence:3min

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CW	3.75	1.375	1.2538	100.0	

Wall Conditioning

GD(Before Exp.): None , GD(After Exp.): H2 , Cryopump(During Exp.): on

Remarks

(instability)CXS, FIDA, LID
(turbulence)CXS, MSE, ECH off axis
(instability)HIBP, long pulse NBI

[Precautions for today's LHD experiments]

- (id:677) Impurity gas puff
- (id:685) Mag. Conf.: Using LID coil
- (id:694) Mag. Conf.: Exp. with low gamma (Combined)
- (id:705) ECH: off-axis injection (Combined)
- (id:712) NBI: Injection into the discharges with low fields
- (id:720) Probe: Edge plasma measurement using the fast-scanning Langmuir probes