LHD project

Daily Schedule

Prepared by
H.Kasahara T.Tsujimura

Date	Experimental Subject
2021/11/2(Tue)	Accumulation of confinement data in the case of significant ion heating Isotope effects of multi-scale turbulence Z-dependence of transport characteristics for the high-Ti plasmas Transition to the high ion temperature discharge

Exp. No.	Topical Group	TGL	Sub-TGL
1226	multi-ion/turbulence	N.Tamura/M.Kobayashi T.Tokuzawa [2337/2169, 2217]	H.Kasahara/G.Motojima T.Kobayashi/T.Tsujimura/M.Nakata [2065/2142, 2231/2023/2276]

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

Details and Experimental Conditions	Gas
[multi-ion](09:45 ～ 13:15)ECH, NBI Accumulation of confinement data in the case of significant ion heating (H. Yamada). Maximum number of discharges : 40 Sequence:3min	D2,Ar
[turbulence](13:15 ～ 14:45)ECH, NBI, ICH Isotope effects on plasma confinement properties and nonlinear interaction of multi- scale turbulence in LHD plasmas are investigated. Maximum number of discharges : 40 Sequence:3min	H2,D2,He,Ar
[multi-ion](14:45 ～ 17:15)ECH, NBI Z-dependence of transport characteristics for the high-Ti plasmas (M. Goto). Maximum number of discharges : 40 Sequence:3min	He,Ar
[turbulence](17:15 ～ 18:45)ECH, NBI, ICH Plasma behaviors at the boundary of the transition to the high ion temperature discharge are tested for understanding the transition to the high ion temperature discharges. Maximum number of discharges : 40 Sequence:3min	H2,D2,He,Ar

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CCW	3.6	1.64	1.2538	100.0	
2		CCW	3.6	2.75	1.2538	100.0	

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

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

#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled
1		CCW	3.55	2.7887	1.2538	100.0	

Wall Conditioning

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

Remarks

(multi-ion)Deuterium glow discharge for wall conditioning, work diverter cryo-pumping
(turbulence)DivCryo ON except for 2-I
GPI, Reflectometer, PCI, BES, CXS, TS, ECE
(multi-ion)use of LID
(turbulence)DivCryo ON except for 2-I
GPI, Reflectometer, PCI, BES, CXS, TS, ECE
【Precautions for today's LHD experiments】
(id:612) Impurity pellet/TESPEL
(id:617) Mag. Conf.: Rax = 3.55 - 3.599 m
(id:626) Mag. Conf.: Using LID coil
(id:631) perpNBI>10MJ : Subcool required