

Daily Schedule

Prepared by

N.Tamura

Date	Experimental Subject																																						
2024/5/2(Thu)	Demonstration of real-time ECH plasma control by the data assimilation system ASTI Interaction between GAM and turbulence Characteristics of millimeter wave vortex on heating, current drive, and propagation in high-density plasmas																																						
Exp. No.	Experimental Session Group						Session Coordinator																																
1358	TC/IA						T.kobayashi[2231] / A.Shimizu[2454] K.Ogawa[2229] / T.Kawate[2256]																																
Time Table	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22																								
		UP	[TC]	[IA]	[TC]	DN																																	
Details and Experimental Conditions														Gas																									
[TC](10:30 ~ 11:45) ECH, NBI 10:30-11:45 Demonstration of real-time ECH plasma control by the data assimilation system ASTI (S. Murakami (Kyoto Univ.), N. Kenmochi) # NBI calib. (3 shots) will be done between 10:30-11:45. NBI pattern #7: (#1, #2, #3, #4, #5) - (#1, #2, #3, #5) - (#1, #2, #3) - (#1, #2) Sequence:3min <table><tr><th>#</th><th>Option</th><th>Polarity</th><th>Rax(m)</th><th>Bax(T)</th><th>gamma</th><th>Bq(%)</th><th>Subcooled</th></tr><tr><td>1</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></table>														#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	1		CW	3.6	2.75	1.2538	100.0		H2,Ar									
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1		CW	3.6	2.75	1.2538	100.0																																	
[IA](11:45 ~ 13:30) ECH, NBI 11:45-12:05 [Change of Mag. Config.: 3.6m, 2.75T -> 3.75m, 1.375T] 12:05-13:30 Interaction between GAM and turbulence (T. Tokuzawa) # [Change of Mag. Config. 3.75m, 1.375T -> 3.75m, 1.25T] will be done between 12:05 and 13:30. Sequence:3min <table><tr><th>#</th><th>Option</th><th>Polarity</th><th>Rax(m)</th><th>Bax(T)</th><th>gamma</th><th>Bq(%)</th><th>Subcooled</th></tr><tr><td>1</td><td></td><td>CW</td><td>3.75</td><td>1.375</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>2</td><td></td><td>CW</td><td>3.75</td><td>1.25</td><td>1.2538</td><td>100.0</td><td></td></tr></table>														#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	1		CW	3.75	1.375	1.2538	100.0		2		CW	3.75	1.25	1.2538	100.0		H2,Ar	
#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled																																
1		CW	3.75	1.375	1.2538	100.0																																	
2		CW	3.75	1.25	1.2538	100.0																																	
[TC](13:30 ~ 16:45) ECH, NBI 13:30-14:05 [Change of Mag. Config. 3.75m, 1.25T -> 3.6m, 2.75T] 14:05-15:17 Characteristics of millimeter wave vortex on heating, current drive, and propagation in high-density plasmas (S. Kubo (Chubu Univ.), M. Nishiura) 15:17-16:45 Demonstration of real-time ECH plasma control by the data assimilation system ASTI (S. Murakami (Kyoto Univ.), N. Kenmochi) Sequence:3min <table><tr><th>#</th><th>Option</th><th>Polarity</th><th>Rax(m)</th><th>Bax(T)</th><th>gamma</th><th>Bq(%)</th><th>Subcooled</th></tr><tr><td>1</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></table>														#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	1		CW	3.6	2.75	1.2538	100.0		H2,Ar									
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1		CW	3.6	2.75	1.2538	100.0																																	
Wall Conditioning																																							
GD(Before Exp.): None , GD(After Exp.): None , Cryopump(During Exp.): on																																							
Remarks																																							
(TC)Realtime-TS, BS, C-CXS(Ti) with NBI#5																																							
(IA)HIBP, MSE, LID(cancel, 12:05-13:30)																																							
(TC)ECE, cECE, HIBP, realtime-TS, BS																																							
[Precautions for today's LHD experiments] (id:724) Impurity gas puff (id:730) ECH: Overdense heating (id:731) Mag. Conf.: Using LID coil (id:733) High plasma current exp. (100 kA =< Ip < 150kA) (Combined) (id:748) ECH: off-axis injection (Combined) (id:752) NBI: Injection into the discharges with low fields (id:757) ECH: Optical Vortex injection																																							