

Daily Schedule

Prepared by

S.Masuzaki
A.Shimizu
H.Kasahara
N.Tamura

Date		Experimental Subject																																																																														
2022/01/19(Wed)		knock-on tail Isotope effects on plasma confinement properties and nonlinear interaction of multi-scale turbulence Study of poloidal and toroidal asymmetries during impurity seeding Alfven-Eigenmode																																																																														
Exp. No.		Topical Group					TGL					Sub-TGL																																																																				
1287		instability/turbulence /multi-ion					K.Nagaoka/Y.Takemura T.Tokuzawa N.Tamura/M.Kobayashi [2177/2167, 2217, 2337/2169]					R.Seki/N.Kenmochi A.Shimizu/T.Kobayashi/M.Nishiura/M.Nakata H.Kasahara/G.Motojima [2201/2208, 2454/2231/2184/2276, 2203/2142]																																																																				
Time Table		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22																																																																
			U P	[instability]			[turbulenc e]		[multi-ion]		[instabili ty]		D N																																																																			
Details and Experimental Conditions															Gas																																																																	
[instability Coordinator: Y.Takemura](09:45 ~ 13:15) ECH, NBI, ICH 10:00-13:10 Observation of knock-on tail (KT) formation using DD neutrons and 6LiD γ-rays (H. Matsuura, K. Ogawa) Maximum number of discharges : 90 Sequence:3min <table><tr><td>#</td><td>Option</td><td>Polarity</td><td>Rax(m)</td><td>Bax(T)</td><td>gamma</td><td>Bq(%)</td><td>Subcooled</td></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></table>															#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	1		CCW	3.6	2.75	1.2538	100.0		H2,D2,Ar																																																	
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[turbulence Coordinator: AkihiroShimizu](13:15 ~ 15:00) ECH, NBI 13:10-14:40 Isotope effects on plasma confinement properties and nonlinear interaction of multi-scale turbulence (J. Cheng, M. Kobayashi) 14:40-15:00 Magnetic field configuration change Maximum number of discharges : 50 Sequence:3min <table><tr><td>#</td><td>Option</td><td>Polarity</td><td>Rax(m)</td><td>Bax(T)</td><td>gamma</td><td>Bq(%)</td><td>Subcooled</td></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></table>															#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	1		CCW	3.6	2.75	1.2538	100.0		H2,He																																																	
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[multi-ion Coordinator: HiroshiKasahara](15:00 ~ 17:15) ECH, NBI 15:00-16:30 Study of poloidal and toroidal asymmetries during impurity seeding (Peterson, Mukai) 16:30-17:10 Magnetic field configuration change Maximum number of discharges : 50 Sequence:3min <table><tr><td>#</td><td>Option</td><td>Polarity</td><td>Rax(m)</td><td>Bax(T)</td><td>gamma</td><td>Bq(%)</td><td>Subcooled</td></tr><tr><td>1</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></table>															#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	1		CCW	3.75	2.64	1.2538	100.0		H2,He,N2 ,Ne																																																	
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[instability Coordinator: Y.Takemura](17:15 ~ 18:45) ECH, NBI 17:10-18:45 Study of Fast-Ion Stiffness in Alfven-Eigenmode at Helical Device(S. Kamio, K. Nagaoka) piggyback Validation of high-energy NB shine-through model (M. Osakabe, S. Sumida) Maximum number of discharges : 50 Sequence:3min <table><tr><td>#</td><td>Option</td><td>Polarity</td><td>Rax(m)</td><td>Bax(T)</td><td>gamma</td><td>Bq(%)</td><td>Subcooled</td></tr><tr><td>1</td><td></td><td>CCW</td><td>3.6</td><td>0.75</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>2</td><td>✓</td><td>CCW</td><td>3.6</td><td>1.0</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>3</td><td>✓</td><td>CCW</td><td>3.6</td><td>0.6</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>4</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>5</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>6</td><td>✓</td><td>CCW</td><td>3.9</td><td>2.5385</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>7</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>															#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	1		CCW	3.6	0.75	1.2538	100.0		2	✓	CCW	3.6	1.0	1.2538	100.0		3	✓	CCW	3.6	0.6	1.2538	100.0		4	✓	CCW	3.6	2.75	1.2538	100.0		5	✓	CCW	3.75	2.64	1.2538	100.0		6	✓	CCW	3.9	2.5385	1.2538	100.0		7	✓	CCW	3.55	2.7887	1.2538	100.0		H2,D2	
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Wall Conditioning																																																																																
		GD(Before Exp.): None , GD(After Exp.): None , Cryopump(During Exp.): on																																																																														
Remarks		(instability) High purity H beam, Impurity Pellet CXS(Li profile, Ion temperature), CNPA,DNPA,CNES, open NBI#3 gate (turbulence)GPI, PCI, reflectometer, BES, CXS(Open gate valve of NBI#3), TS, ECE (multi-ion)(BL3 injection) (instability)CXS, FIDA, open NBI#3 gate [Precautions for today's LHD experiments] (id:676) Impurity pellet/TESPEL (id:677) Impurity gas puff (id:685) Mag. Conf.: Using LID coil (id:706) ICH: Antennae insertion for plasma heating by ICH : Subcool required (id:712) NBI: Injection into the discharges with low fields (id:722) Insertion of sample, etc: Insertion of water-cooled tungsten divertor test piece																																																																														