

Daily Schedule

Prepared by

S.Masuzaki
H.Kasahara
T.Oishi
N.Tamura

Date	Experimental Subject																																														
2022/10/26(Wed)	Acquisition of spectroscopic data for solar plasma diagnostics Transport study in ECRH superposed ion ITB plasma High-Z ion spectroscopy Mixture induced phase transition in multi-ion transport																																														
Exp. No.	Topical Group						TGL					Sub-TGL																																			
1292	spectroscopy/multi-ion						M. Goto N.Tamura/M.Kobayashi [2290, 2337/2169]					M.Yoshinuma/T.Oishi/T.Kawate H.Kasahara/G.Motojima [2172/2022/2256, 2203/2142]																																			
Time Table	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22																																
		U	[spectroscopy]		[multi-ion]		[spectroscopy]		[multi-ion]		D																																				
		P									N																																				
Details and Experimental Conditions														Gas																																	
[spectroscopy Coordinator: TetsutarouOishi](09:45 ~ 11:15) ECH, NBI 9:45-10:55 Calibration of Solar EUV Spectrometers and Validation of Diagnostic Capability for Solar High-Temperature Plasmas by LHD Experiments (H. Hara, I. Murakami) 10:55-11:25 Change of magnetic field coordination Maximum number of discharges : 40 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>CCW</td><td>3.9</td><td>1.0</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>2</td><td>✓</td><td>CCW</td><td>3.9</td><td>1.375</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>3</td><td>✓</td><td>CCW</td><td>3.75</td><td>1.375</td><td>1.2538</td><td>100.0</td><td></td></tr></table>														#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	1		CCW	3.9	1.0	1.2538	100.0		2	✓	CCW	3.9	1.375	1.2538	100.0		3	✓	CCW	3.75	1.375	1.2538	100.0		H2,Ar	
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[multi-ion Coordinator: H.Kasahara](11:15 ~ 13:30) ECH, NBI, ICH 11:25-13:35 Transport study in ECRH superposed ion ITB plasma (H.Nakano) Rax=3.58m, 3:30 Maximum number of discharges : 60 Sequence:3min, 3min30s(Wall DC) <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>CCW</td><td>3.58</td><td>2.765</td><td>1.2538</td><td>100.0</td><td></td></tr></table>														#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	1		CCW	3.58	2.765	1.2538	100.0		H2,D2,He,Ar																	
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[spectroscopy Coordinator: TetsutarouOishi](13:30 ~ 16:15) ECH, NBI 13:35-14:40 Collection and assessment of the transition data required for the quantitative studies of heavy element nucleosynthesis in neutron star mergers (D. Kato) 14:40-15:45 Experimental identification of spectral lines from highly charged heavy ions / Precision spectral measurements of highly charged rare earth ions and their data analysis with non-empirical MCDF-CI calculations (C. Suzuki, F. Koike) 15:45-15:55 NBI calibration 15:55-16:15 Change of magnetic field coordination Maximum number of discharges : 60 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>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,N2,Ne,Ar																	
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1		CCW	3.6	2.75	1.2538	100.0																																									
[multi-ion Coordinator: H.Kasahara](16:15 ~ 18:45) ECH, NBI 16:15-18:45 Mixture induced phase transition in multi-ion transport (A.Dinklage, N.Tamura) Maximum number of discharges : 70 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>CCW</td><td>3.55</td><td>2.7887</td><td>1.2538</td><td>100.0</td><td></td></tr><tr><td>2</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></table>														#	Option	Polarity	Rax(m)	Bax(T)	gamma	Bq(%)	Subcooled	1		CCW	3.55	2.7887	1.2538	100.0		2		CCW	3.9	2.5385	1.2538	100.0		H2,D2,He,Ar									
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Wall Conditioning		GD(Before Exp.): None , GD(After Exp.): D2 , Cryopump(During Exp.): on																																													
Remarks		(multi-ion)BL3 gate open for CXS measurement He profile measurements with CXS, Er Discharge cleaning with ICH C pellet injection 【Precautions for today's LHD experiments】 (id:676) Impurity pellet/TESPEL (id:677) Impurity gas puff (id:681) Mag. Conf.: 3.55 m =< Rax < 3.6 m (id:704) ECH: EC wave injection for more than 10 s (Combined) (id:705) ECH: off-axis injection (Combined) (id:706) ICH: Antennae insertion for plasma heating by ICH : Subcool required (id:720) Probe: Edge plasma measurement using the fast-scanning Langmuir probes (id:722) Insertion of sample, etc: Insertion of water-cooled tungsten divertor test piece																																													