

Agenda of Joint Meeting
FY'24 US-Japan MHD workshop
43rd ITPA MDC TG meeting

JST/KST Duration Discussion

Day 1- 22 April 2024

9:15	0:10		Opening remarks	Yasushi Todo (Duputy Director General of NIFS) Masaru Furukawa / N. Logan	In-Person
9:25	0:05		Internet connection, Logistics, Lunch, etc. (Chair: Nik Logan)	LOC	In-Person
9:30	0:50	0:10	Overview of MHD experiments in LHD (Overview)	Yuki Takemura	In-Person
10:30	0:20		Coffee Break (Chair: Masaru Furukawa)		
10:50	0:30	0:05	Perturbed Ion Temperature and Toroidal Flow Profile Measurements in Rotating Neoclassical Tearing Mode Magnetic Islands (Invited)	Laszlo Bardoczi	Remote
11:25	0:20	0:05	Nonlocal phase coupling in turbulence spreading across the magnetic island	Yi Zhang	Remote
11:50	0:10		Group Photo		
12:00	2:00		Lunch Break (Chair: Yoshihide Shibata)		
14:00	0:50	0:10	Overview of DIII-D experiments (Overview)	N. Logan	In-Person
15:00	0:20	0:05	Time evolution calculation method of MHD equilibrium considering eddy currents	Yushiro Yamashita	In-Person
15:25	0:20		Coffee Break (Chair: Jeff Levesque)		
15:45	0:20	0:05	Divertor footprint modeling due to RMP and role of plasma response models	Guanqi Dong	In-Person
16:10	0:20	0:05	Impurity radiation driven and seeded growth of magnetic islands in tokamaks	Ping ZHU	In-Person
16:35	0:20	0:05	Soft X-ray tomography using L1 regularization for MHD modes with limited sight lines in JT-60SA	Bando Takahiro	Remote
17:00			Adjourn		

Day 2- 23 April 2024

			(Chair: Kiyomasa Watanabe)		
9:15	0:30	0:05	Real-time ML and adaptive 3D-field control for high-confinement and ELM-suppression in tokamak plasmas (invited)	SangKyeun Kim	Remote
9:50	0:30	0:05	Nonlinear frequency chirping and associated particle transport in tokamaks and stellarators (invited)	Chang Liu	Remote
10:25	0:30		Coffee Break (Chair: Ping Zhu)		
10:55	0:20	0:05	Numerically investigating the influence of runaway current on sawtooth oscillations in tokamaks	Ruirui Ma	Remote
11:20	0:20	0:05	Reduced four-field model of single helicity, incompressible MHD and application to magnetorotational	Masaru Furukawa	In-Person
11:45	0:20	0:05	Resistive interchange instability response to external RMP, and its parameter dependence to suppress the instability	Kiyomasa Watanabe	
12:10	2:05		Lunch Break		
13:15	1:00		LHD tour (Chair: Andreas Bierwage)		
14:15	0:30	0:05	Simulation Study of Energetic-Particle Driven Off-Axis Fishbone Instability in Tokamak Plasmas (invited)	Hanzheng Li	In-Person
14:50	0:20	0:05	Effect of the energetic particle on the stability of pressure gradient and current driven modes	Jacobo Varela Rodriguez	In-Person
15:15	0:30		Coffee Break (Chair: Jacobo Varela Rodriguez)		
15:45	0:20	0:05	Multi-branch quasi-interchange instabilities driven by energetic particle in a toroidal plasma	Yutian Miao	Remote
16:10	0:20	0:05	Analysis of double-peaked fishbone-like modes in KSTAR	Andreas Bierwage	In-Person
16:35	0:20	0:05	Low-Frequency Energetic-Particle-Driven Magnetohydrodynamics Modes in Low Magnetic Shear q=1 Tokamak Plasmas	Panith Adulsiriswad	In-Person
17:00			Adjourn		

UTC CEST CST IST PDT

0:15	2:15	8:15	5:45	17:15
0:25	2:25	8:25	5:55	17:25
0:30	2:30	8:30	6:00	17:30
1:30	3:30	9:30	7:00	18:30
1:50	3:50	9:50	7:20	18:50
2:25	4:25	10:25	7:55	19:25
2:50	4:50	10:50	8:20	19:50
5:00	7:00	13:00	10:30	22:00
6:00	8:00	14:00	11:30	23:00
6:25	8:25	14:25	11:55	23:25
6:45	8:45	14:45	12:15	23:45
7:10	9:10	15:10	12:40	0:10
7:35	9:35	15:35	13:05	0:35
8:00	10:00	16:00	13:30	1:00

0:15	2:15	8:15	5:45	17:15
0:50	2:50	8:50	6:20	17:50
1:25	3:25	9:25	6:55	18:25
1:55	3:55	9:55	7:25	18:55
2:20	4:20	10:20	7:50	19:20
2:45	4:45	10:45	8:15	19:45
4:15	6:15	12:15	9:45	21:15
5:15	7:15	13:15	10:45	22:15
5:50	7:50	13:50	11:20	22:50
6:15	8:15	14:15	11:45	23:15
6:45	8:45	14:45	12:15	23:45
7:10	9:10	15:10	12:40	0:10
7:35	9:35	15:35	13:05	0:35
8:00	10:00	16:00	13:30	1:00

Day 3- 24 April 2024

Joint Focussed Session on Control and MHD Issues in JT-60 SA (Chair: Alfredo Portone)					
9:15	0:10		Introduction to the session	Alfredo Portone	In-Person
9:25	0:50	0:10	JT60SA integrated commissioning highlights (Overview)	Shizuo Inoue	In-Person
10:25	0:30	0:05	General aspects of JT-60SA MHD Stability and Control (invited)	Gianluca Pucella	In-Person
10:55	0:20		Coffee Break		
11:15	0:20	0:05	Plasma modelling for vertical stabilization and shape control	Shizuo Inoue	In-Person
11:40	0:20	0:05	Disruption modelling and mitigation with MGI in JT-60SA	Tatsuya Yokoyama	In-Person
12:05	0:20		Discussion		
12:25	0:05		Summary of US-Japan MHD workshop	Masaru Furukawa	In-Person
12:30	1:15:00		Lunch Break		
			ITER Overview Talks (Chair: Indranil Bandyopadhyay)		
13:45	0:30	0:10	Update on the Status of the ITER Project	Michael Lehnen	In-Person
14:25	0:30	0:10	ITER Disruption Issues, status of DMS design and DMS task force work	Michael Lehnen	In-Person
15:05	0:20		Discussion		
15:25	0:20		Coffee Break		
			Contributed papers (Chair: Akinobu Matsuyama)		
15:45	0:15	0:05	CP1: Potential for disruptions in "current-free" stellarators	Robert Granetz	In-Person
16:05	0:15	0:05	CP2: Bifurcation of MHD in two q=1 surfaces in EAST electron heating dominant plasma with B-wall/W-Wall	Liqing Xu	In-Person
16:25	0:15	0:05	CP3: Cross-tokamak Analysis of Disruption prediction	Zheng Wei	In-Person
16:45	0:15	0:05	CP4: Status of implementing a Runaway Electron Mitigation Coil (REMC) on HBT-EP	Jeff Levesque	In-Person
17:05	0:15	0:05	CP5: VMEC modelling of helical core modes in MAST and MAST-U	Christopher Ham	Remote
17:25	0:15:00	0:05	CP6: m/n = 2/1 NTMs having helical cores and its contribution to sawtooth suppression in JT-60U	Takahiro Bando	Remote
17:45			Adjourn		

Meeting Dinner

Day 4- 25 April 2024

Focussed Session on Error Field Control and related Issues (Chair: Nikolas Logan)					
9:15	0:20	0:05	MDC-19 Updates, including SPARC EF strategy	Nikolas Logan	In-Person
9:40	0:20	0:05	Non-disruptive Error Field Identification in JET and MAST-U	Lidia Piron	Remote
10:05	0:20	0:05	Low-n sideband components of RMP fields and their impact on error field correction in ITER	Bai Xue	In-Person
10:30	0:20		Coffee Break		
10:50	0:20	0:05	Summary of error field scaling studies in EAST and implications for ITER	Hui-hui Wang	In-Person
11:15	0:20	0:05	DIII-D nondisruptive error field correction studies and nonlinear MHD modeling	Qiming Hu	Remote
11:40	0:20	0:05	Tailoring error fields to control plasma instabilities and transport	SeongMoo Yang	Remote
12:05	0:20		Discussion		
12:25	1:15:00		Lunch Break		
			JEX/JA Presentations (Chair: Michael Lehnen)		
13:40	0:20	0:05	MDC-105-1: Control for disruption-free operation	Mark Maraschek	Remote
14:05	0:20	0:05	MDC-JA-4: UFO disruptions and divertor hot spot monitoring	Robert Granetz	In-Person
14:30	0:20	0:05	MDC-JA-3: Disruption forces - theory and modelling	Vadim Yanovskiy	Remote
14:55	0:20		Coffee Break		
15:15	0:20	0:05	MDC-22: Development of the ITER DMS trigger algorithm	Alessandro Pau	In-Person
15:40	0:20	0:05	MDC-23: Formation, avoidance, and suppression of RE by massive material injection	Sheikh Umar	In-Person
16:05	0:20	0:05	MDC-24: Shattered Pellet Injection Physics Validation	Nick Eidietis	In-person
16:30	0:20	0:05	MDC-25: Sources and Scalings of Non-axisymmetric Sideways Disruption Forces for ITER	Vadim Yanovskiy	Remote
16:55	0:20	0:05	MDC-DIVSOL-1: Characterization of power deposition to PFCs by runaway electrons	Eric Nardon	Remote
17:20	0:20		Discussion		
17:40			Adjourn		

0:15	2:15	8:15	5:45	17:15
0:25	2:25	8:25	5:55	17:25
1:25	3:25	9:25	6:55	18:25
1:55	3:55	9:55	7:25	18:55
2:15	4:15	10:15	7:45	19:15
2:40	4:40	10:40	8:10	19:40
3:05	5:05	11:05	8:35	20:05
3:25	5:25	11:25	8:55	20:25
3:30	5:30	11:30	9:00	20:30
4:45	6:45	12:45	10:15	21:45
5:25	7:25	13:25	10:55	22:25
6:05	8:05	14:05	11:35	23:05
6:25	8:25	14:25	11:55	23:25
6:45	8:45	14:45	12:15	23:45
7:05	9:05	15:05	12:35	0:05
7:25	9:25	15:25	12:55	0:25
7:45	9:45	15:45	13:15	0:45
8:05	10:05	16:05	13:35	1:05
8:25	10:25	16:25	13:55	1:25
8:45	10:45	16:45	14:15	1:45

0:15	2:15	8:15	5:45	17:15
0:40	2:40	8:40	6:10	17:40
1:05	3:05	9:05	6:35	18:05
1:30	3:30	9:30	7:00	18:30
1:50	3:50	9:50	7:20	18:50
2:15	4:15	10:15	7:45	19:15
2:40	4:40	10:40	8:10	19:40
3:05	5:05	11:05	8:35	20:05
3:25	5:25	11:25	8:55	20:25
4:40	6:40	12:40	10:10	21:40
5:05	7:05	13:05	10:35	22:05
5:30	7:30	13:30	11:00	22:30
5:55	7:55	13:55	11:25	22:55
6:15	8:15	14:15	11:45	23:15
6:40	8:40	14:40	12:10	23:40
7:05	9:05	15:05	12:35	0:05
7:30	9:30	15:30	13:00	0:30
7:55	9:55	15:55	13:25	0:55
8:20	10:20	16:20	13:50	1:20
8:40	10:40	16:40	14:10	1:40

Day 5- 26 April 2024

			Contributed papers (Chair: Nick Eidietis)		
9:15	0:15	0:05	CP7: Joint experiment on density asymmetries during SPI on J-TEXT and HL-3	Yi Liu	In-Person
9:35	0:15	0:05	CP8: Update on SPARC Disruption Systems and Scoping for the ARC Power Plant	Ryan Sweeney	In-Person
9:55	0:15	0:05	CP9: Plasma disruption prediction and MHD research based on AI algorithm on EAST	Bihao Guo	In-Person
10:15	0:15	0:05	CP10: Magnetic disturbance during and after pure hydrogen and hydrogen-neon mixed pellet injection in LHD	Akinobu Matsuyama	In-Person
10:35	0:15	0:05	CP11: Impurity effect on tearing mode and neoclassical tearing mode in EAST tungsten divertor plasma	Yanmin Duan	In-Person
10:55	0:15	0:05	CP12: Current flows towards the divertor during VDEs at COMPASS	Riccardo Rocella	In-Person
11:15	0:20		Coffee Break		
			Focussed Session on Sawtooth Control and related Issues (Chair: Jong-Kyu Park)		
11:35	0:30	0:10	Continuous (1,1) mode in tokamaks: from helical equilibrium to flux pumping	Valentin Igoshine	Remote
12:15	0:20	0:05	Novel Intrinsic Helical Cores in DIII-D	William Boyes	Remote
12:40	1:15:00		Lunch Break		
13:55	0:20:00	0:05	Measurement of diamagnetic dynamo effect in EAST Tokamak	Wenzhe Mao	In-Person
14:20	0:20:00	0:05	Experimental evidence of magnetic flux pumping at AUG and JET	Andreas Burckhart	Remote
14:45	0:20:00		Discussion		
			Session on Nuclear Fusion Special Issue (Chair: Robert Granetz)		
15:05	0:20		Coffee Break		
15:25	0:20		Status of the MDC Chapter	I. Bandyopadhyay	In-Person
15:45	0:30		Discussion		
16:15	0:10		Future ITPA MDC meetings	I. Bandyopadhyay	In-Person
16:25			Meeting Closure		

0:15	2:15	8:15	5:45	17:15
0:35	2:35	8:35	6:05	17:35
0:55	2:55	8:55	6:25	17:55
1:15	3:15	9:15	6:45	18:15
1:35	3:35	9:35	7:05	18:35
2:15	4:15	10:15	7:45	19:15
2:35	4:35	10:35	8:05	19:35
3:15	5:15	11:15	8:45	20:15
3:40	5:40	11:40	9:10	20:40
4:55	6:55	12:55	10:25	21:55
5:20	7:20	13:20	10:50	22:20
5:45	7:45	13:45	11:15	22:45
6:05	8:05	14:05	11:35	23:05
6:25	8:25	14:25	11:55	23:25
6:45	8:45	14:45	12:15	23:45
7:15	9:15	15:15	12:45	0:15
7:25	9:25	15:25	12:55	0:25