

30th Workshop on MHD Stability Control					
ID	Start	End	Monday 7/13	Tuesday 7/14	Wednesday 7/15
Morning #1	8:30		Hollmann Herfindal Marini Xue	Chen Nelson Leuthold	Logan Barr Khavin Benjamin
		10:00			
Coffee #1	10:00	10:30			
Morning #2	10:30		Bursch Richner Hanson	Myers Hurst Takemura Izzo	Zimmermann Pharr Chandra Bardóczi
		12:00			
Lunch	12:00	13:30			
Afternoon #1	13:30		Li Williams Kumar	Poster / Group Photo	Bustos Ramirez Sabbagh Tobin Lee
		15:00			
Coffee #2	15:00	15:30			
Afternoon #2	15:30		Butt Chiriboga Burgess		Akçay Saperstein Lunia Boyes
		17:00			
Venue			Qualcomm Conference Center		
San Diego, California: July 13-15, 2026					
Invited talks	22 minutes	Uninterrupted			
Contributed talks	14 minutes	Uninterrupted			
Discussions	26 minutes	On all previous talks, including clarifying questions			
Lunch	90 minutes	Restaurants nearby			
Session title	Talk title		Chair		Assistant chair
CDT: Disruptions	8:30	10:00	Monday	Logan	Chandra
Hollmann Herfindal Marini Xue	Progress report on disruption STA goals for 2026 Demonstration of plasma shutdown using cryogenic shell pellet injection on DIII-D Active control of runaway electron impact phase with non-axisymmetric magnetic fields in DIII-D Numerical investigation of effects of MHD and resonant magnetic perturbations on runaway electron losses in DIII-D				
Morning #1	10:30	12:00	Monday	Yang	Tobin
Bursch Richner Hanson	Disruption-free tokamak error field identification in a single discharge using magnetic island healing Estimating 3D fields from variations in MHD mode frequency Improving DIII-D error field source models and correction				
Afternoon #1	13:30	15:00	Monday	Leuthold	Akçay
Li Williams Kumar	Self-regulation of global, pedestal-scale peeling-ballooning modes in a low-collisionality, peeling-limited grassy ELM regime Transport impacts of resonant island chains Active magnetic control simulations of vertical stability coils for ARC-class equilibria				
Afternoon #2	15:30	17:00	Monday	Sabbagh	Lunia
Butt Chiriboga Burgess	Potential for RMP as an actuator in predictive avoidance of transitional ELMs: case studies with wide-pedestal QH mode and enhanced pedestal H-mode Machine learning driven feedback control of n=1 MHD instabilities using optical diagnostics on HBT-EP Inclusion of rational surface coupling and curvature stabilization in toroidal tearing stability				

Session title	Talk title			Chair	Assistant chair
CDT: ELMs	8:30	10:00	Tuesday	Hollmann	Pharr
Chen	Updates on advancing intrinsically no-ELM/small-ELM regimes for FPP				
Nelson	Statistical EPED predictions from ELM-free scenarios in DIII-D and implications for fusion pilot plant				
Leuthold	Overview of enhanced D-alpha and quasi-continuous exhaust H-modes at DIII-D				
Morning #2	10:30	12:00	Tuesday	Hanson	Khavin
Myers	Critical parameters and impacts of edge harmonic oscillation persistence in wide-pedestal QH-mode				
Hurst	High-amplitude, saturated m/n = 1/1 kink modes in toroidal plasmas with edge safety factor near the Kruskal-Shafranov limit				
Takemura	Extended modeling of amplitude-frequency dynamics of rotating MHD instabilities				
Izzo	Two-temperature MHD simulations of cryogenic shell pellet injection into DIII-D				
Session title	Poster title				
Poster	13:30	17:00	Tuesday		
Yang	Fast-ion enhanced modeling of neoclassical tearing modes at DIII-D and NSTX				
Saperstein	Phase-dependent disruption prediction in Alcator C-Mod				
Ferraro	Mitigating Risks from Abrupt Confinement Loss (MiRACL) FIRE overview				
Myers	Critical parameters and impacts of edge harmonic oscillation persistence in wide-pedestal QH-mode				
Wang	Self-consistent simulations of MHD instabilities with kinetic alpha particles in SPARC using the M3D-C1-k code				
DeGrandchamp	MHD phenomenology of high-qmin plasmas in DIII-D with and without ITBs				
Chow	Turbulence behavior in the presence of 2/1 RMP magnetic islands at DIII-D				
Session title	Talk title			Chair	Assistant chair
CDT: MHD	8:30	10:00	Wednesday	Chen	Meyers
Logan	Overview of integrated core and edge MHD instability control for metallic wall tokamaks				
Barr	Proximity-to-instability control on D3D and KSTAR				
Khavin	Stochastic layer effects on drift kinetic solutions near magnetic island				
Benjamin	Towards an uncertainty-aware, general m,n tearing analysis workflow for large-scale tearing database generation				
Morning #3	10:30	12:00	Wednesday	Kumar	Burgess
Zimmermann	Assessing the effect of error field penetration during plasma current ramp-up in the DIII-D tokamak				
Pharr	Coordinate-invariant metrics for resonant drive in perturbed ideal and resistive tokamak equilibria				
Chandra	Validation of C-Mod MHD mode labeling tool on DIII-D				
Bardóczy	Statistical analysis of time delays between edge localized modes and neoclassical tearing mode onsets in DIII-D ITER Baseline Scenario discharges				
DECAF	13:30	15:00	Wednesday	Marini	Hurst
Bustos Ramirez	The DECAF real-time disruption prediction and avoidance system in KSTAR				
Sabbagh	Physics considerations for producing high beta spherical tokamak plasmas and recent real-time results in forecasting and avoiding disruptions				
Tobin	Avoidance of disruptions due to vertical displacement events on MAST-U using real-time stability assessment				
Lee	Automated AI-enhanced neural network reconstruction and classification of MHD modes from KSTAR ECEI data for Disruption Event Characterization and Forecasting				
Afternoon #3	15:30	17:00	Wednesday	Nelson	Yang
Akcay	Probabilistic prediction of locking to a resonant error field within the FUSE whole-device modeling framework				
Saperstein	Off-normal simulations of radiative collapse events in Alcator C-Mod				
Lunia	Multi-machine characterization of RMP ELM suppression thresholds in double-null configurations				
Boyes	Ensemble learning and distillation for prediction of tearing modes				