AGENDA

12th Workshop on MHD Stability Control: Improved MHD Control Configurations

Columbia University, New York, NY
Sunday, November 18 - Tuesday, November 20

Sunday

9:00-9:55	Registration	*Coffee during registration (no morning break)*
9:55-10:00	Gerald Navratil	Welcome and announcements

Session 1	**Chair: R. La Haye**	**Resistive Wall Mode: Experiments (I)**
10:00-10:40	Andrea Garofalo	Overview of recent results on RWM research on DIII-D
10:40-11:05	Jeremy Hanson	A Kalman filter for active feedback on rotating external kink instabilities in a tokamak plasma
11:05-11:45	Steve Sabbagh	Overview of recent results on RWM research on NSTX
11:45-12:10	Will Bergerson	Observation of the RWM in a line-tied screw pinch
12:10-12:35	Holger Reimerdes	Progress on understanding rotational stabilization in DIII-D

12:35-2:00   *Lunch*

Session 2	**Chair: R. Buttery**	**Modeling, Error Field Physics**
2:00-2:40	Yueqiang Liu	RWM modeling with full drift kinetic damping
2:40-3:05	J. Dalessio / E. Schuster	Model-based robust control of resistive wall modes
3:05-3:30	Y. Ou / E. Schuster	Optimal control of the current profile during the ramp-up phase of the discharge
3:30-3:50		*Coffee Break*
3:50-4:30	Alan Reiman	Passive stabilization of the vertical mode in tokamaks by parallelogram-shaped nonaxisymmetric coils
4:30-4:55	Morrell Chance	Multi-mode analysis of RWM feedback with NMA code
4:55-5:20	Jon Menard	Error field physics studies in NSTX
5:20-5:45	Mike Schaffer	Error field physics studies in DIII-D
5:45-6:00	Hiro Takahashi	Error fields generated by scrape-off-layer current (SOLC)

6:00-6:15   Discussion on Sunday topics

6:15-7:15   Social hour, drinks and light snacks provided

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Monday

8:55-9:00   Announcements

Session 3	Chair: J. Sarff	ELM Control, Disruptions, Tearing Modes
9:00-9:40	Mike Schaffer	ELM control by RMPs: Physics basis, concepts for ITER, and advanced techniques
9:40-10:20	Egbert Westerhof	Preparations for ECRH feedback control of tearing modes on TEXTOR
10:20-10:45	Mike Makowski	Observation and analysis of MHD with the DIII-D fast MSE system
10:45-11:05		*Coffee Break*
11:05-11:45	Val Izzo	Disruption mitigation, modeling and expt. highlights
11:45-12:10	Francesco Volpe	Oblique-ECE-assisted alignment and modulation of ECCD for NTM control
12:10-12:35	Rob La Haye	Requirements for Alignment of ECCD for NTM Stabilization in ITER

12:35-2:00   *Lunch*

Session 4	Chair: M. Okabayashi	Resistive Wall Mode: Experiments (II)
2:00-2:40	Paolo Zanca	Clean mode control: beyond the virtual shell
2:40-3:05	Jim Drake	RWM control on EXTRAP T2R using various controller configurations
3:05-3:30	Gary Jackson	DIII-D Ohmic current driven RWM experiments with feedback stabilization
3:30-3:50		*Coffee Break*
3:50-4:15	Yongkyoon In	Toroidal phase dependency of ELM-driven RWM
4:15-4:40	Tommaso Bolzonella	Recent results on RWM research on RFX-mod
4:40-5:05	Erik Olofsson	Spectrum reference for RFP RWMs and modern MIMO controller synthesis
5:05-5:30	Roberto Paccagnella	Studies on externally applied m=0 modes in the RFX-mod Reversed Field Pinch
5:30-5:55	Anton Soppelsa	MIMO Modeling and Design for MHD Modes Control in RFX-mod

5:55-6:10   Discussion on Monday topics

7:00   Cash bar, Le Monde Restaurant
7:30   Workshop Dinner, Le Monde Restaurant

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Tuesday

8:55-9:00   Announcements

Session 5	Chair: G. Navratil	Tearing Modes, MHD Control in Future Devices
9:00-9:40	Brett Chapman	High beta and high temperature plasmas in the MST RFP
9:40-10:20	Dylan Brennan	Flow Shear Effects on Resistive MHD Instabilities in Tokamaks
10:20-10:45	Amiya Sen	Control of Internal MHD Modes in Tokamaks: Novel Hardware and Software
10:45-11:05		*Coffee Break*
11:05-11:30	Jim Bialek	ITER resistive wall mode feedback with rotation: Recent VALEN modeling
11:30-11:55	Oksana Katsuro-Hopkins	Modeling of active control in KSTAR
11:55-12:20	Rip Perkins	Window pane vs. push-pull actuator coils in ITER
12:20-12:45	Richard Buttery	Tests of n=1 and n=2 for ELM control
12:45-1:00	Ted Strait	Summary of the ITPA meeting at Garching
1:00 -1:15	Gerry Navratil	Final discussion and perspectives on future research
1:15	Rob La Haye	Next MHD Control Workshop: Theme and location
1:30		End