

14th Workshop on Active Control of MHD Stability: Active MHD Control in ITER

Agenda (tentative)

Nov. 9th Monday morning

8:00 - 8:30

- Registration

8:30 - 8:45

- Opening remark and welcome

Michael Zarnstorff

- Sawteeth and energetic particle driven mode control

Session chair

Michio Okabayashi

8:45 - 9:35

• Sawteeth control (invited)

Simon Pinches

9:35 - 10:25

• Stochastic transport due to low amplitude
TAE modes in DIII-D (invited)

Roscoe White

10:25 - 10:45

Coffee

10:45 - 11:10

• Fast ion loss & redistribution by MHD on NSTX

Eric Fredrickson

11:10 - 12:00

• TAE control (invited)

Herb Berk

12:00 - 12:10

- Photo

12:00 - 1:00

Lunch

Nov. 9th Monday afternoon

-NTM control

Session Chair

Rob La Haye

1:00 - 1:50

• NTM control (invited)

Marc Maraschek

1:50 - 2:15

• RMP effect on tearing mode dynamics: modeling
and experimental results

Lorenzo Frassinetti

2:15 - 2:40

- Real-time control of tearing modes using a line-of-sight Electron Cyclotron Emission Diagnostic'

Bart Hennen

- Extremum-Seeking Stabilization of Neoclassical Tearing Modes in Tokamak Plasmas

Eugenio Schuster

3:05 -3:30

- Oblique-ECE-assisted aligned, modulated ECCD stabilization of NTMs at DIII-D

Francesco Volpe

3:30 - 3:40

Coffee

- Disruption control

Session Chair

Jerry Navratil

3:40 - 4:30

- Disruption control (invited)

M. Lehnen

4:30 - 4:55

- Wall Force produced during Disruptions

Hank Strauss

4:55 - 5:45

- Snowflake divertor configuration control (invited)

M. Umansky

5:45 - 6:10

- Effect of impurities and Lithium wall conditioning on NTM onset in NSTX

Francesco Volpe

6:10-6:30

- The Role of Kinetic Effects, Including Plasma Rotation and Energetic Particles, in Resistive Wall Mode Stability

John Berkery

6:30

- End of session

Nov. 10th Tuesday morning

- RWM control

Session Chair Lionello Marrelli

8:00 - 8:50

- RFX-mod: RWM and equilibrium control (invited) Tomaaso Bolzonella

8:50 - 9:15

- New HBT-EP Wall and Control Coil System Design and Future Experimental Plans David Maurer

9:15 - 10:05

- RWM controllability (current-driven RWM) (invited) Yongkyoon In

10:05 - 10:20

Coffee

10:20 - 11:10

- RWM control code maturity (invited) Yueqiang Liu

11:10 - 11:35

- Design of a Linear-Quadratic-Gaussian controller for resistive wall mode stabilization in NSTX Oksana Katsuro-Hopkins

11:35 - 12:00

- Outline of a Novel Control of Major Disruptions In ITER Amiya Sen

12:00 - 1:00

lunch

Nov. 10th Tuesday afternoon

- ELM control and Non axi-symmetric field effects (1)

Session Chair Manabu Takechi

1:00 - 1:50

- ELM control-1(invited) Mikhail Tokar

1:50 - 2:40

- ELM control-2 (invited) Ben Dudson

2:40 - 3:05

- Interactions between MHD events in the JT-60U high-beta plasmas Go Matsunaga

3:05 - 3:15

Coffee (at room B318 on third floor)

3:15 - 4:05

- 3D helical equilibrium control (invited)

Allen Boozer

4:05 - 4:30

- Effect of 3d fields near the Tearing Beta Limit

Richard Buttery

- RFP mode control

Session Chair

Ted Strait

4:30 - 5:20

- Mode control of RFP (invited)

Erik Olofsson

5:20 - 5:45

- Progresses in resonant modes control in RFX-mod

Lionello Marrelli

5:45 - 6:10

- Pseudo-decoupler approach to error-field correction in RFX-mod

Paolo Piovesan

6:10 - End of session

7:00 - 9:00

Banquet at Prospect House at Princeton University Campus

Nov. 11th Wednesday morning

- ELM control and Non axi-symmetric field effects (2)

Session Chair

Richard Buttery

8:00 - 8:50

- Studies of Resonant and Non-Resonant Error Fields in NSTX (invited)

Stefan Gerhardt

8:50 - 9:40

- Locked Magnetic Islands in Toroidally Flow Damped Tokamak Plasmas (invited)

Richard Fitzpatrick

9:40 - 10:05

- Measurement and model validation of three-dimensional tokamak equilibria

Matthew Lanctot

10:05 - 10:30

- H-mode error field threshold

Holger Reimerdes

10:30 - 10:50

Coffee

10:50 - 11:15

- Several remarks about modes rotation and coupling in tokamak

I. Semenov, S. Mirnov

-RWM control (2)

Session Chair

Tommaso Bolzonella

11:15 - 11:40

- The search for multiple RWM behavior at high normalized beta in NSTX

Steven A. Sabbagh

11:40 - 12:05

- Design of RWM control on JT-60SA

Manabu Takechi

12:05 - 12:30

- The basics of multi mode VALEN

James Bialek

12:30 -12:55

- SXR measurements of Resistive Wall Mode behavior in NSTX

Luis Felipe Delgado-Aparicio

12:55

**- Discussion: theme and place for 2010 15th Active
MHD Control workshop**

Francesco Volpe

13:10

- Closing