

MHD on NSTX - 2004

Presented by D. A. Gates

At the NSTX Research Forum

Princeton Plasma Physics Laboratory, Princeton NJ

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MHD Meeting Goals



- Create a prioritized list of proposed experiments
- Examine content of experimental proposals and identify any missing program elements
- Identify similar proposals and combine when appropriate

Many new capabilities for 2005



- Full RWM coil capability - active control...
- Modified PF1A coil
- Up to 14 channels of MSE
- Routine equilibrium reconstruction with rotation
- New edge Thomson channels for edge profiles

Schedule



Gates/Sabbagh	10min (1:00)	Introductory remarks
Jarboe	15min (1:10)	Relaxation in MFE Experiments
Gates	10min (1:25)	Troyon Scaling at high I_N , high δ , modified PF1A
Menard	20min (1:35)	Onset and saturation characteristics of 1/1 mode Error field/locked-mode studies using RWM coils
Sabbagh	20min (2:05)	MHD Spectroscopy RFA suppression Active RWM stabilization High β_p equilibrium limit
Sontag	15min (2:25)	Dissipation physics DIIID/NSTX RWM similarity experiments
Zhu	15min (2:40)	Investigation of rotation damping physics
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Break	20 min (2:55 – 3:15)	
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Fredrickson	20min (3:15)	Feedback parameter scans Rotation of stable/unstable RWM NTM triggers Reflectometry
Heidbrink	15min (3:30)	Investigation of chirping (fishbone) instabilities
Ishida	15min (3:50)	Ellipticity criterion for flowing 2-fluid high β eq.
Shaing	10min(4:05)	
Prioritization discussion (4:05 – 5:30)		