

# MHD XP Presentations: NSTX Forum 9/22/2004

## ❑ MHD XP Presentations requesting run time

❑ Troyon Scaling at high $I_N$ , high $\delta$ , modified PF1A (Gates)	2-3 days
❑ Error field/locked-mode studies using RWM coils (Menard)	2.0 days
❑ Onset and saturation characteristics of the 1/1 mode (Menard)	1.5 days
❑ MHD spectroscopy of wall stabilized high $\beta$ plasmas (Sabbagh)	1.0 days
❑ Suppression of resonant field amplification at high $\beta_N$ (Sabbagh)	1.0 days
❑ Active stabilization of the resistive wall mode (Sabbagh)	2.0 days
❑ XP414: Aspect ratio effects near the high $\beta_p$ equilibrium limit (Sabbagh)	1.5 days
❑ XP428: Dissipation physics of the RWM (Sontag)	1.5 days
❑ XP453: DIII-D/NSTX RWM similarity experiment (Sontag)	1.5 days
❑ Active control of rotation damping in RWM plasmas (Zhu)	1.5 days
❑ Fishbone mode and the beam ion distribution function (Heidbrink)	1.0 days
❑ Neoclassical tearing modes (Fredrickson)	1.0 days
❑ Kinetic Instabilities – TAE/central shear/q(0) – L-mode (Fredrickson)	0.5 days
❑ DIII-D/NSTX CAE similarity experiment ( $B_t = 6$ kG) (Fredrickson)	0.5 days
❑ External kink and control of RWM (Okabayashi)	1.0 days

(guidance: 8 days for 14 week run, 12 days for longer run)

Run days: 19.5-20.5

# MHD XP Prioritization: NSTX Forum 9/22/2004 (8 day)

## ❑ MHD XP Presentations requesting run time

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|---|----------|
| ❑ Troyon Scaling at high $I_N$ , high $\delta$ , modified PF1A (Gates)  | 1.0 days |
| ❑ Error field/locked-mode studies using RWM coils (Menard)  | 1.0 days |
| ❑ MHD spectroscopy of wall stabilized high $\beta$ plasmas (Sabbagh)  | 1.0 days |
| ❑ Suppression of resonant field amplification at high $\beta_N$ (Sabbagh)   | 1.0 days |
| ❑ Active stabilization of the resistive wall mode (Sabbagh)   | 1.0 days |
| ❑ XP453: DIII-D/NSTX RWM similarity experiment (Sontag)   | 0.5 days |
| ❑ XP428: Dissipation physics of the RWM (Sontag)  | 0.5 days |
| ❑ Onset and saturation characteristics of the 1/1 mode (Menard)   | 0.5 days |
| ❑ Active control of rotation damping in RWM plasmas (Zhu) <ul style="list-style-type: none"><li>● External kink and control of RWM (Okabayashi)</li></ul> | 1.0 days |
| ❑ XP414: Aspect ratio effects near the high $\beta_p$ equilibrium limit (Sabbagh)   | 0.5 days |
| ❑ Fishbone mode and the beam ion distribution function (Heidbrink)  | 0.5 days |
| ❑ DIII-D/NSTX CAE similarity experiment ( $B_t = 6$ kG) (Fredrickson)   | 0.5 days |
| ❑ Neoclassical tearing modes (Fredrickson) (piggyback)  | 0.0 days |
| ❑ Kinetic Instabilities – TAE/central shear/q(0) – L-mode (Fredrickson) (pb)  | 0.0 days |

(guidance: 8 days for 14 week run, 12 days for longer run)

Run days: 8.0

# MHD XP Prioritization: NSTX Forum 9/22/2004 (12 day)

<input type="checkbox"/> MHD XP Presentations requesting run time	<u>MHD (contingency)</u>
❑ Troyon Scaling at high $I_N$ , high $\delta$ , modified PF1A (Gates)	1.5 days (+1.5)
❑ Error field/locked-mode studies using RWM coils (Menard)	1.5 days (+0.5)
❑ MHD spectroscopy of wall stabilized high $\beta$ plasmas (Sabbagh)	1.0 days
❑ Suppression of resonant field amplification at high $\beta_N$ (Sabbagh)	1.5 days
❑ Active stabilization of the resistive wall mode (Sabbagh)	1.5 days (+0.5)
❑ XP453: DIII-D/NSTX RWM similarity experiment (Sontag)	1.0 days
❑ XP428: Dissipation physics of the RWM (Sontag)	0.5 days (+0.5)
❑ Onset and saturation characteristics of the 1/1 mode (Menard)	0.5 days
❑ Active control of rotation damping in RWM plasmas (Zhu) <ul style="list-style-type: none"><li>● External kink and control of RWM (Okabayashi)</li></ul>	1.0 days
❑ XP414: Aspect ratio effects near the high $\beta_p$ equilibrium limit (Sabbagh)	0.5 days
❑ Fishbone mode and the beam ion distribution function (Heidbrink)	0.5 days
❑ DIII-D/NSTX CAE similarity experiment ( $B_t = 6$ kG) (Fredrickson)	0.5 days (+0.5)
❑ Neoclassical tearing modes (Fredrickson)	0.5 days
❑ Kinetic Instabilities – TAE/central shear/q(0) – L-mode (Fredrickson) (pb)	0.0 days

(guidance: 8 days for 14 week run, 12 days for longer run) Run days: 12.0 (+ 3.5 contingency)