

FY2010 NSTX Wave-Particle Interaction Topical Science Group Planning

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Theory & Modeling

**FY2010 NSTX Research Forum
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FY2010 Wave-Particle Interactions TSG Research

- Milestone R(10-2) to characterize HHFW heating, current drive, and current ramp-up in D₂ H-mode plasmas
- WPI TSG allocated 6 days for 1st priority, 8 days for 1st & 2nd priority
 - 26 proposal ideas submitted
 - 11 proposals require HHFW (9 address R(10-2))
 - 28 run days requested (16 “minimum useful” run days)
- NSTX WPI research planning at 1:00 PM today in B-252
- Meeting to plan HHFW start-up & I_p ramp-up 10:00 AM on Wednesday in B-233 (with SFSU TSG)

WPI TSG Meeting Agenda

Tuesday 1:00 PM – 5:30 PM in LSB252

Time	Presenter	Title
1:00	Gary Taylor	Planning Guidance & Agenda
1:10	Bill Heidbrink	Effect of HHFW on Rapidly Chirping Modes
1:20	Joel Hosea	HHFW Heating Coupling Versus ELM Activity RF Heating in the Divertor and SOL regions RF Interaction with the LLD
1:35	Ben LeBlanc	Heating Efficiency of HHFW in NBI Target Plasmas
1:45	Phil Ryan	HHFW Experiments
1:55	Gary Taylor	Low I_p HHFW Heating Experiments
2:05	Cynthia Phillips	Update on HHFW Theory and Modeling Activities for NSTX
2:15	Mario Podesta	Characterization of Low-Frequency Alfvénic Modes Effect of HHFW on Plasma Rotation HHFW Absorption on Fast Ions
2:30	Guo-Yong Fu	Validation of M3D-K Code for Beam-Driven TAE Modes Energetic Particle-Driven GAM in NSTX
2:40	Eric Fredrickson	H-Mode TAE (GAE) Avalanches Documentation of Angelfish Documentation of High-Frequency CAE Revisit N=3 Breaking and affect on TAE Stability
2:55	Doug Darrow	Energetic Particle Mode Studies
3:05	Sid Medley	“Anomalous” High-Energy Feature on Energetic Ion Spectra in NSTX Using the E//B NPA
3:15	Jeehyun Kim	Interferometric Observation of RF Induced Density Induced Density Fluctuation Using FIRE TIP
3:25	Kevin Tritz	Characterization of GAE Modes and Their Effect on Electron Thermal Transport
3:35	Bob Harvey	Computational Modeling Comparisons with NSTX
3:45	David Gates	Plasma Jogs with FIR Interferometry to Measure *AE Activity in H-Mode
3:55	Shige Kubota	Radial Amplitude of $\delta n(r)$ (and $\delta E(r)$) Induced by HHFW with Reflectometry
4:05	Neal Crocker	Error field modulation of TAEs Conversion of *AEs to Kinetic Alfvén Waves
4:15	David Smith	BES measurements of low-frequency AE/EPM mode structures
4:25		Discussion & Prioritization of Experiments