

# 2006 NSTX Results Review

## July 26 - 27, 2006

### AGENDA

*Wed, July 26*

9:00 AM R. Goldston - Welcome  
9:10 AM M. Bell – Discussion of Research Forum format

#### **9:30 AM Solenoid Free Startup (R. Raman, Chair)**

R. Raman – Transient CHI startup on NSTX (XP606)  
D. Mueller – Edge current drive (XP533)  
X. Tang – Current multiplication and flux amplification in NSTX CHI experiments

**10:15 Coffee**

#### **10:30 AM Integrated Scenario Development (D. Gates, Chair)**

J. Menard – LSN long pulse development (XP602)  
D. Gates – DN long pulse development (XP603)  
C. Kessel (Gates) – Non-inductive current ramp-up (XP627)

#### **11:15 AM MHD (J. Menard, Chair)**

J. Menard – Error field correction (XP614)  
S. Sabbagh – Active RWM control (XP615)  
A. Sontag (Sabbagh) – Passive RWM stabilization physics in NSTX (XP619)  
W. Zhu (Sabbagh) – Rotation damping  
R. LaHaye (R) – Optimization of EF vs rotation (XP618)

**12:30 Lunch**

#### **1:30 PM Waves and Particles (G. Taylor, Chair)**

W. Heidbrink (R) – Recent chirping analysis  
W. Heidbrink (R) – Transport of fast ions by fishbones and TAEs (XP607)  
N. Gorelenkov – New beam driven modes below the GAM frequency in NSTX  
N. Crocker – Investigation of fast ion mode dynamics and spatial structure in NSTX  
E. Fredrickson – Characterization of NBI driven current evolution (XP608)  
E. Fredrickson – Stabilization of angelfish with HHFW?  
E. Fredrickson – Possible observation of cascade-like modes on NSTX  
S. Medley – Status of the investigations of fast ion redistribution or loss due to MHD modes and Alfvén instabilities in NSTX  
D. Liu – Overview of SSNPA results

- D. Darrow – Beam ion loss from NSTX plasmas
- G.Y. Fu – Progress in hybrid simulations of beam-driven Alfvén modes in NSTX
- E. Belova - Simulations of NBI-driven Global Alfvén Eigenmodes in NSTX
- J. Hosea – HHFW propagation and damping properties vs  $B_T$  and  $k_{\parallel}$  (XP617)
- S. Diem (Taylor) – Thermal EBW conversion to O-Mode at 8 – 40 GHz (XP625)
- C. Phillips – Recent advances in full wave HHFW modeling in NSTX
- J. Wilgen (Ryan) – Reflectometer sensing of RF waves in front of the HHFW antenna

**Thursday, July 27**

**9:00 AM      Transport and Turbulence (M. Bell, Chair)**

- F. Levinton – Reversed magnetic shear in L-mode (XP610)
- D. Smith – Core electron gyroscale fluctuations for reversed shear and monotonic discharges in NSTX (XP620)
- H. Park – High-k scattering measurements across the L-H transition (XP629)
- D. Stutman – Perturbed electron transport (XP612)
- L. Aparicio – Impurity transport in H-modes (XP613)
- S. Kaye –  $B_T/b$  scaling of confinement (XP532)

**10:30 AM                  Coffee**

- S. Kubota -
- G. Rewoldt – Application of GTC-Neo for NSTX cases
- D. Mikkelsen – GYRO simulations of turbulence in NSTX L-mode plasmas
- J. Kim – ETG turbulence and NSTX transport
- R. Bell – Carbon plumes

**12:00                  Lunch**

**1:30 PM                  Boundary Physics (V. Soukhanovskii, Chair)**

- H. Kugel – Lithium deposition (XP601)
- J. Lewandowski – Numerical model of the Li evaporator for NSTX
- J. Boedo – Density scan, edge turbulence, deposition studies (XP604)
- V. Soukhanovskii – Divertor heat loads (XP605)
- V. Soukhanovskii – Supersonic gas jet (XP626)
- R. Maingi (R) - Moveable glow probe (XP616)
- R. Maingi (R) – Pedestal dependence on aspect ratio (XP529)
- C. Skinner – Measurement of dynamic retention and deposition (XP604)
- K. Williams – Edge turbulence in high density ohmic plasmas in NSTX (XP630)
- S. Zweben – Analysis of GPI data from the 2004 run
- D. Stotler – DEGAS 2 Modeling of GPI experiments
- J. Myra (R) – Blob transport theory and GPI imaging analysis
- C. Bush – Divertor characteristics from Langmuir Probe measurements during NBI
- J. Wang (R) – Hypervelocity dust injector (HDI) for NSTX