

## NSTX Weekly Report (January 25, 2008)

### FY 2008 NSTX plasma operations

**Planned: TBD**

**Completed: 0 weeks**

- NSTX researchers presented both near (2008-2010) and longer term (2011-13) research plans to the NSTX Program Advisory Committee (PAC) in a three-day meeting this week. The PAC largely endorsed the team's proposed prioritization of research and associated key upgrades in both research periods, and the PAC encourages the NSTX Team to fully embrace the priorities and focused research plan. (J. Menard)
- There will be an NSTX Physics Meeting on Monday, 1/28 at 1:30 PM. The featured speaker will be Frank Jenko of Max-Planck Institute, Garching, who will give a talk entitled: **"Surprises in gyrokinetic turbulence simulations: Some recent GENE results."** (S. Kaye)
- The February NSTX Team Meeting will be held on Tuesday, February 5, 2008 at 1:30 P.M., in B318. The team will be updated on the plasma operation and experimental plan. A summary of the NSTX PAC meeting held last week and the preparation status toward the Budget Planning Meeting will be also presented.

### Engineering Operations (A. von Halle, C. Neumeyer)

The return to NSTX operations is in progress with the completion of combined field high power test shots, and the start of plasma shots in support of plasma control system and magnetic diagnostic testing. Magnetic sensors and the new current transducers to monitor RWM error field coil polarities were successfully tested this week, and the neutral beam ion sources were conditioned to levels needed to support upcoming experiments.

The NSTX test Cell will be in restricted access throughout next week during plasma operations. Test cell access will be available from 5PM to ~10PM each evening.

### Research Operations (M. Bell)

#### Diagnostic Operations (R. Kaita)

- The major diagnostic operations activity last week was the calibration of the magnetic diagnostics with NSTX fields. The procedure included pulsing all of the required poloidal field, toroidal field, and Ohmic heating coil combinations to check the sensors used for equilibrium reconstructions. The error field and resistive wall mode coil and current calibrations are ongoing. (J. Menard)

#### Boundary Physics (H. Kugel)

- LITER Bay K, power and thermocouple feedthrough connections were completed, and preparations started for leak checking the assembled parts. The bellows-to-oven coupler was completed. An

upgraded bellows support unit for providing support during crane-lifts was completed.

- The LLD test chamber pump down started. Preparation of the vacuum is in progress for installing LITER Bay F as an evaporation source. A teleconference was held with Richard Nygren SNL Project Manager for the LLD development to discuss recent work and preparations for a CDR.