

## NSTX Weekly Report (Dec. 05, 2008)

### **FY 2009 NSTX plasma operations**

**Planned: TBD**

**Completed: 0 run weeks**

Stewart Zweben gave a seminar Dec. 5 at Columbia University on "Experiments to Modify the Scrape-off Layer in NSTX". (S. Zweben)

The NSTX Team Meeting was held on Dec. 4, 2008. The meeting presentation material is on the NSTX web page.

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

The NSTX outage continued this week with ongoing diagnostic calibrations in preparation for vessel pump-down. The vacuum window for the MPTS diagnostic collection system was replaced, and alignments utilizing the HeNe Laser were completed. All twelve of the RF feedthroughs for the HHFW antenna system have been installed, and vacuum leak checking is in progress. Vacuum leak checking of the new BES diagnostic vessel ports has been completed. The re-installation and testing of the TF coil flexible bus links is in progress and nearing completion. The NSTX test cell will be in free (card reader) access this coming week.

### **Research Operations (M. Bell)**

#### Boundary Physics Operations (H. Kugel)

- Liquid Lithium Divertor (LLJ)
  - Gages for testing LLD segment fabrication were completed.
  - Pre-braze cutting of the first copper segment was completed. Layout of the brazing foil was completed. Preparations for vacuum brazing of 316-SS to the first copper segment on 12/08/08 are in progress.
  - New 0.875" thick aluminum for a second prototype is being prepared for sending to the bending vendor next week. Specifications for step-bending a second prototype were reviewed with the vendor. The accepted step-bending specifications will be provided to the vendor for set-up, along with a gage for measuring the completed job.
  
- Sample probe
  - A Work Request was submitted for fabrication and assembly of the sample probe support stand.

#### Diagnostic Operations (R. Kaita)

- Position calibration measurements were completed for the high-k turbulence diagnostic. The physical locations of the beam spot from an alignment laser were determined with a FARO measuring arm as the mirrors were moved. The corresponding outputs from the mirror

drive shaft encoders for the new remote control system were recorded.