

## NSTX-U Weekly Report (May 29, 2015)

### **NSTX-U is in the Upgrade Project outage in FY 2015**

#### **Experimental Research Operations (S. Gerhardt, R. Kaita)**

The exit flight tube of MPTS has started to be baked. This flight tube has been baked to 50° C for a short period yesterday and plans are in place to bake it all day today until the end of the second shift. (A. Diallo, PPPL)

The Material Analysis Particle Probe (MAPP) probe and chamber were installed, pumped and leak checked. All vacuum components of the MAPP have been determined to be leak tight from the analysis chamber attached to NSTX-U through the probe drive below it. Preparation of the electronics rack for installation in the NSTX-U Test Cell has been completed with the connection of all components to a single point ground. (R. Ellis, R. Kaita, PPPL)

#### **Engineering Operations (A. von Halle, P. Titus)**

Recovery from an external arc fault at the Ohmic Heating (OH) coil terminals continued this past week. Clean-up of the upper ceramic break assembly was completed, and daily inner/outer vacuum vessel electrical insulation tests (Hi-Pots) have resumed. A trial of the OH Coil coaxial connection assembly potting process was performed, and results are being analyzed. New G-10 spacers for the TF connector restraints are being fabricated, and tests of a structural filler (adhesive) to minimize stresses in that area have been completed. Assembly of the Multi-Pulse Thompson Scattering (MPTS) diagnostic flight tubes has been completed, and a vacuum bake is underway. Testing of the MPTS safety interlocks has been completed, and the Laser Room shutter has been locked and tagged closed to accommodate isolated testing of the MPTS Lasers. Field Coil Power Conversion (FCPC) rectifier dummy load testing of additional TF parallel circuits continued this week.

Access to the NSTX-U Test Cell is expected to be available this coming week. Access must be arranged through Work Permits approved by the D-Site Shift Supervisors.