

NSTX-U Weekly Report (June 1, 2012)

NSTX-U is in the Upgrade Project outage in FY 2012

Mike Jaworski (PPPL) and Tyler Abrams (Princeton University) conducted experiments at the Magnum-PSI linear test stand at the Dutch Institute for Fundamental Energy Research (DIFFER) in the Netherlands May 26 – June 2, 2012. Experiments related to the behavior of lithium coatings on NSTX-U candidate PFCs were conducted and M. Jaworski gave a seminar entitled, "Liquid Lithium Research at the Princeton Plasma Physics Laboratory". (M. Jaworski)

M. Ono (PPPL) visited the Seoul National University (SNU) CARFRE (Center for Advanced Research for Fusion Reactor Engineering) group in Seoul, Korea on May 25, 2012 under the US-Korea collaboration agreement. He discussed various collaboration topics including spherical torus reactor, spherical torus experiments, and possible future collaborations with Profs. Y-S Hwang, T-S. Hahm, J. H. Han, and Y-S. Na. He visited the VEST (spherical torus) facility where an ECH start-up experiment was being conducted. He gave a seminar to the CARFRE group a talk entitled "NSTX Program Plan and Upgrade Project Status". (M. Ono)

Engineering Operations (A. von Halle, C. Neumeier)

NSTX Upgrade construction activities continued this week the ongoing removals of the RWM and Locked Mode coils at bays I to K as needed for the upcoming vessel modifications for the second neutral beam. The Procedures for cutting the vacuum vessel for the installation of the new Bay J/K cap and neutral beam port is out for review, and comments are now being incorporated. Preparations for the removal of outer TF coil #7 are nearing completion, and that lift/removal is scheduled for later next week. The first inner TF conductor is in the coil fabrication facility being taped with an insulating wrap, and cooling tubes have now been soldered into inner TF conductors 2 through 4. On the neutral beams, reassembly of components for the 2nd neutral beam-line continued, and the lift procedure for moving that beam-line into the NSTX Test cell is out for review. Neutral beam cryogenic line fabrication and installation in the NSTX Test Cell continues.

Access to the NSTX test cell will be available only through previous arrangement with the Upgrade Work Control Center.