

## **NSTX-U Weekly Report (October 20, 2017)**

**FY 2018 status: NSTX-U is in a maintenance and repair outage.**

### **Recovery**

In the magnet area, for the PF-1A prototype test VPI log, the bundle and mold have been placed in the VPI oven and the VPI tubing (plastic) is being cut to the proper lengths. The PF-1A prototype coil tooling design & fabrication is progressing. VPI mold drawings have been signed off and requisition for external fabrication is submitted. The winding mandrel is complete and has passed inspection. Winding mandrel components (Tapered cylinder, wedge shims and flanges) will now be assembled to test their functionality. A kickoff meeting was held with the second vendor awarded a subcontract for fabrication of a PF1A prototype coil.

In the Vacuum Vessel and Internal Hardware area, fatigue property data on SS, Inconel, and copper parts for the passive plates was collected, and ANSYS models run, and it was determined that Inconel bolts are needed and sufficient. 2D axi-symmetric thermal modeling of the inboard divertor cooling plate based on updated tile and cooling plate designs were performed.

### **Research**

Dry runs were held for invited, oral, and poster presentations for the APS-DPP meeting to be held in Milwaukee, WI October 23-27, 2017.