

NSTX-U Weekly Report (November 18, 2016)

FY 2017, NSTX-U is in the maintenance and repair outage.

Steve Sabbagh and Jack Berkery of Columbia University attended the 21st MHD Stability and Control Workshop held at General Atomics in San Diego, CA (7-9 Nov), giving the lead (invited) and second talks of the meeting, respectively titled “Disruption Event Characterization and Forecasting in Tokamaks”, and “Resistive Wall Modes Stability Physics and Forecasting in NSTX and NSTX-U. (S. Sabbagh)

R. Kaita (PPPL) gave a presentation entitled “Student Research Opportunities at National Laboratories” at the 2016 Annual Meeting of Sigma Xi, The Scientific Research Society. Recent research conducted at PPPL under the USDOE Student Undergraduate Laboratory Internship (SULI) program was highlighted, including projects related to NSTX-U. He was also a member of a panel on the topic “Putting your Degree to Work: Career Options for STEM Graduates.” The panelists represented academia, government, and industry, and provided ideas and resources for pursuing careers in each of these areas. (R. Kaita)

Jon Menard (PPPL) traveled to Cadarache, France on November 15-17, 2016 to serve as a reviewer for the Preliminary Design Review of the ITER Plasma Control System. (J. Menard).

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

The center column (center-stack) was removed from NSTX-U this past week (see photo below), and is being prepared for metrology and disassembly. The PF-1A Lower coil will be removed from the center-stack and brought to the test stand in the Field Coil Power Conversion building for power testing in January, 2017. Recommissioning of the coil winding facility continued with ongoing work on the taping machines and vacuum molds, and on VPI system leak checking. Work continues on the neutral beam (NB) calorimeter assembly testing, and on the NB helium refrigerator internal inspections and telemetry repairs. Maintenance parts for the NB Long Pulse Ion Source parts have been received, and QC inspections and measurements are in progress. Maintenance of the motor generator high power Iso-Phase bus and switches is also in progress.

Access to the NSTX-U Test Cell is expected to be available for approved work this coming week.

The forensic investigation into the failure of the NSTX-U PF1A-U coil has been completed and a Final Report issued. The report reviews the entire investigation regarding the evidence found and the conclusions that can be drawn from that evidence including suggested opportunities for follow up efforts. (I. Zatz, J. Petrella, PPPL)

CS Has Been Removed November 17, 2016

