

NSTX Update (May 28, 2004)

FY 2004 weeks of operation planned: - 18 weeks, Completed: - 14.7 weeks

Department, Project, Program (M. Ono, M. Peng, M. Williams, E. Synakowski)

- R. Kaita gave a seminar entitled, "NSTX Diagnostics for Fusion Plasma Science Studies" at the Schlumberger Princeton Technology Center in Princeton, NJ on June 8, 2004.
- On Monday, June 14, the highlights from the recent PSI meeting will be reviewed at the Monday NSTX Physics meeting. The following individuals, who attended the conference, have kindly agreed to present us with a summary: Introduction Session 2&3: Material Migration 1&2, Session 8: Transient Loading on PFC's -H. Kugel, PSI Modeling and Theory update -D. Stotler, Session 4: Divertor Physics and Parallel Transport Session 6: Divertor Physics -Vlad, Session 7: Tritium Retention, Special ITER Session, Session 13&14: Surface Interaction Physics I&II -C. Skinner, Session 9: ELM Physics, Session 10: ELM Physics and Control Session 11&12: Long-Pulse and enhanced Operation I&II -R. Maingi (C. K. Phillips)
- The June NSTX Team Meeting will be held on **Thursday, June 17, 2004**, in B318 at **1:30 P. M.** The meeting agenda includes the status of the maintenance week and the plan for the remainder of the run. Remote participation will be available for off site team members. (J. Savino)

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

NSTX is in the midst of a two-week maintenance period intended to install the first two RWM coils, and to complete the commissioning of and power connections to the PF4 coil system. By the end of this past week, the PF4 bus jumpers were complete and installed, and ready for power supply connections. The RWM coil installation is progressing well with the welding of the coil mounts in progress. The installation of the power cables for the RWM coil connections should be complete early in the week. Preoperational testing of the Lithium Pellet Injector is in progress, as well as the assembly of the installation of the capacitor bank for CHI transient start-up. The test cell will be open around the clock until Friday, June 18th, when machine area "scrubs" will begin. Plasma operations will resume on Monday, June 21st. (A. von Halle)

Research Operations (M. Bell)

Diagnostic Operations (R. Kaita

- An infrared camera showed about a 20 degree C rise in the beam bellows temperature during the gas-filled torus calibration of the Motional Stark Effect (MSE) diagnostic last week. This occurred with a 50 ms neutral beam pulse when the torus pressure was 50 microtorr. No temperature increase was observed when the torus pressure was reduced to 25 microtorr, so MSE data were obtained with toroidal field only and toroidal field plus 5 kA poloidal field beam shots. Additional infrared camera views of the beam bellows are being considered for future gas-filled torus MSE calibration runs. (F. Levinton)