NSTX Weekly Report (July 7, 2006)

FY 2006 NSTX plasma operations completed on June 23, 2006.
Joule Milestone: 11 weeks
Achieved: 12.66 weeks

R. Maingi (ORNL) visited TJ-II in Madrid and discussed the possibility of small ELM comparison experiments between NSTX and TJ-II. (R. Maingi)

N. Nishino (Professor, Hiroshima University) visited NSTX under the US-Japan personnel exchange program. During his stay, he used his fast visible camera for "dust trajectory" measurements and other transient phenomena in NSTX plasmas. In addition, N. Nishino worked with S. Paul and R. Kaita of PPPL on the development of a new 2D plasma flow measurement system. The layout of the diagnostic was designed and set up, and the field-of-view was shown to be adequate for imaging the plasma on the detector of the Hiroshima fast visible camera. (R. Kaita)

There will be an NSTX Physics meeting on Monday, July 10 at 1:30 pm in LSB318. Henry Kugel will give results of the experimental work on Lithium evaporation. (S. Kaye)

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

The NSTX vacuum vessel was vented this past week, and a pump/dust collection system from INEL installed to take vessel air and dust samples. The vessel will now be purged over the weekend in preparation for removing the neutral beam duct to provide a vessel access port. A full hydrostatic test of the OH coil was also performed this week, successfully verifying the integrity of the recent OH coil lead leak repair. Entry to the NSTX vacuum vessel is expected by late next week.

The test cell will remain in free (card reader) access through the coming week.

Research Operations (M. Bell)

Bounary Physics Operations (H. Kugel)

• After the vessel was vented, 4 samples of airborne dust were obtained from the vessel air, and a lower divertor port viewport was removed for dust sample collection. (C. H. Skinner)