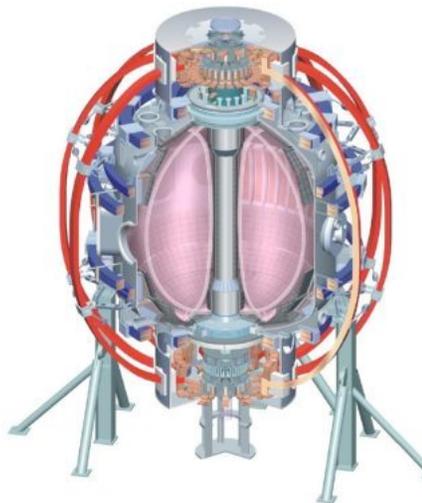


# NSTX Team Meeting

**May 5, 2009**

College W&M  
 Colorado Sch Mines  
 Columbia U  
 Comp-X  
 General Atomics  
 INEL  
 Johns Hopkins U  
 LANL  
 LLNL  
 Lodestar  
 MIT  
 Nova Photonics  
 New York U  
 Old Dominion U  
 ORNL  
 PPPL  
 PSI  
 Princeton U  
 Purdue U  
 SNL  
 Think Tank, Inc.  
 UC Davis  
 UC Irvine  
 UCLA  
 UCSD  
 U Colorado  
 U Maryland  
 U Rochester  
 U Washington  
 U Wisconsin



Culham Sci Ctr  
 U St. Andrews  
 York U  
 Chubu U  
 Fukui U  
 Hiroshima U  
 Hyogo U  
 Kyoto U  
 Kyushu U  
 Kyushu Tokai U  
 NIFS  
 Niigata U  
 U Tokyo  
 JAEA  
 Hebrew U  
 Ioffe Inst  
 RRC Kurchatov Inst  
 TRINITY  
 KBSI  
 KAIST  
 POSTECH  
 ASIPP  
 ENEA, Frascati  
 CEA, Cadarache  
 IPP, Jülich  
 IPP, Garching  
 ASCR, Czech Rep  
 U Quebec

# NSTX Team Meeting Agenda

**Time: 1:30 ~ 3:00, May 5, 2009**

**Place: LSB 318, PPPL**

- **General Items (25 minutes) (Masa/Jon)**
- **Program Update (15 minutes) (Jon/Stan)**
- **Engineering Operations Update (10 minutes) (Al)**
- **Research Operations Update (15 minutes) (Mike)**
- **Run Coordination (10 minutes) (Roger)**
- **New CS/2nd NBI Project Update (15 minutes) (Erik)**

# Safely, Safely, Safely

- **ES&H Issues (J. Levine) -**
- **Received a safety award from the State of New Jersey for eight consecutive years of no away-from-work injuries. Let us keep the good safety record!**
- **Safety related survey for the on-site representatives of the NSTX university/industry collaboration groups which are involved with hardware / NTC activities (Nova, UCI, UCD, UCLA, JHU, UW)**
  - **Are you happy (or unhappy?) with the safety culture at NSTX/PPPL? - Generally happy. Took a few years to get used to it. Strike the right balance**
  - **Are we communicating to you adequately the importance of safety and related training and procedures? - Generally positive responses**
  - **Are we giving sufficient support for your work in terms of safety? - Generally positive responses**
  - **Did you or your group have any near-miss related incidents? - No near misses reported**

# Good practice on Safety

- The PPPL Engineering Team has good safety procedures for energizing our power supplies.
- I believe that the training provided by PPPL and the preparation of the machine techs work well in preventing those hazards.
- I do not think of myself as a collaborator when safety is concerned .
- The "Safety Notes" at the end of the 8:30am meeting are really effective in reminding the importance of safety..
- I believe all of our routine hazards are covered by the provided safety training.
- PPPL personnel are always ready to provide answers to any questions that we have
- PPPL staff have been very helpful in working with us on our safety documentation and procedures.

# Opportunity for Safety Improvements

- The possible hazards are mostly related to the practical work on the machine, for example in-vessel calibration. We encounter the usual hazards for diagnostic work, including working high voltage components (de-energized of course), soldering work, confined space usage, and general test cell hazards like tripping and falling. We have several laser and high voltage activities that have safety related procedures /documents. Part of our diagnostics (cables and waveguide) are exposed and easily damaged. This requires people around our equipment to be **more careful than usual**.
- I suggest people to observe **a better "housekeeping"**, especially in the labs & diagnostic rooms. Sometimes, hardware, tools and other stuff are simply **accumulated for a long time** in the wrong place, thus giving other people the excuse to do the same, and so on so forth.
- A training on hazard of high power laser operation given a few years ago would be helpful. (Look into this with diagnostics and engineering)
- It would be useful if our training certification status and expiration dates were more easily accessible so we could plan ahead. (Look into this with HR)
- Since there is a large amount of NTC activity that our group does, an improved communication and organization would be helpful. (Look into the use of web tool)

# NSTX Issues

**New HHFW antenna requiring extensive external piping installed during the run with plans for availability by mid-June.**

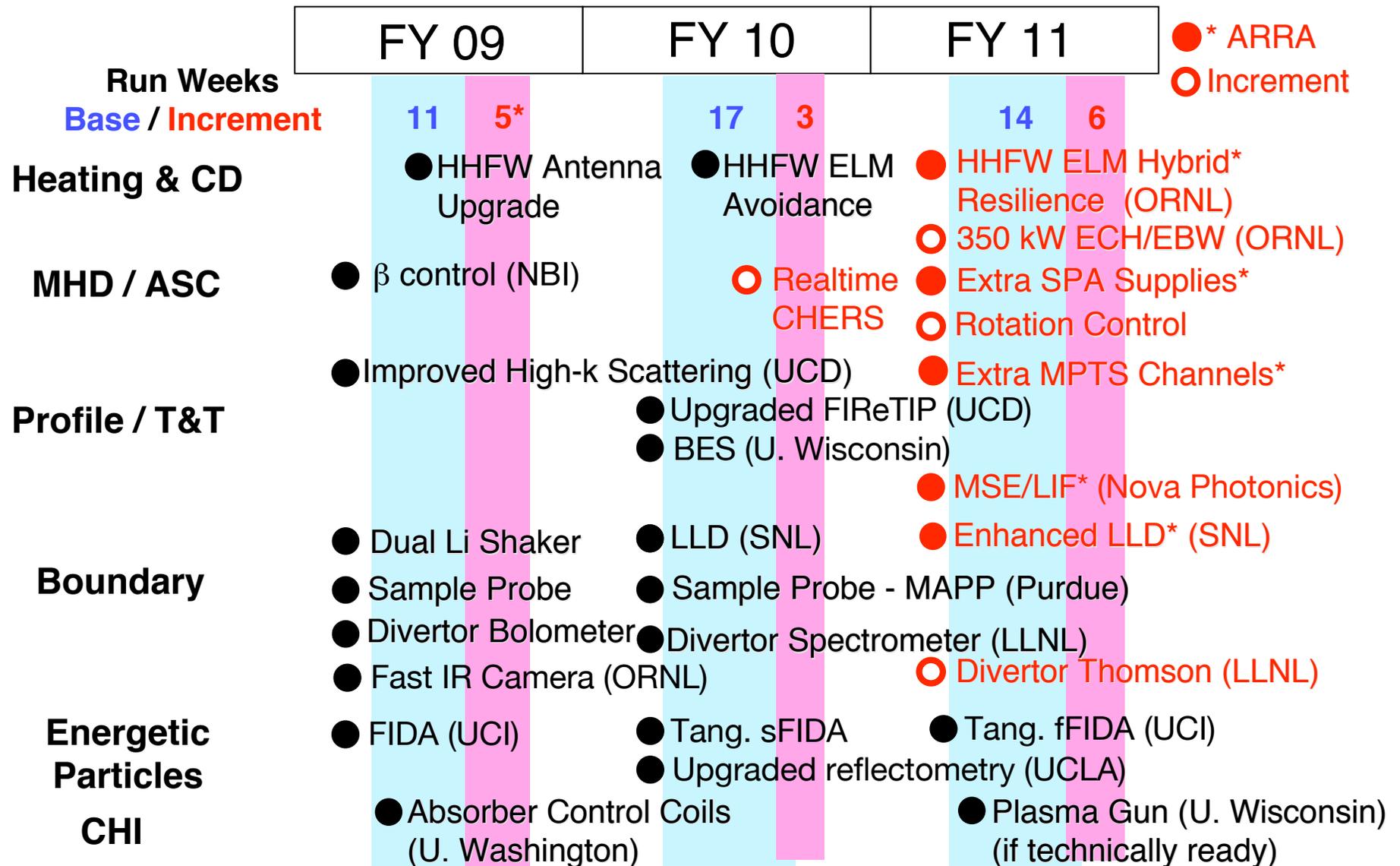
**Availability/assignment of key analysts to support CSU Conceptual Design. (Need to ramp-up the work immediately!)**

**Analysis of staffing needed to support FY2009 outage scope and ARRA facility and diagnostic upgrades still needs to be addressed (within the next month).**

**FY 2010 run of 17 run weeks presents very tight outage schedule (the present schedule shows the mid-March start of the run.)**

# NSTX Near Term Upgrade Plan

ARRA Funding Significantly Enhances Research Capability



# NSTX is on track to meet FY09 milestones

Milestone	Description	Baseline	Comment
JRM(09)	Particle control and hydrogenic fuel retention in tokamaks , NSTX to explore lithium surface	09/30/09	On schedule
R(09-1)	Understand the physics of RWM stabilization and control as a function of rotation.	09/30/09	On schedule
R(09-2)	Study how $j(r)$ is modified by super- Alfvénic ion driven modes.	09/30/09	On schedule
R(09-3)	Perform high-elongation wall-stabilized plasma operation.	09/30/09	On schedule
F(09-1)	Operate NSTX Facility for 11 Experimental Run Weeks.	09/30/09	On schedule
F(09-2)	Complete fabrication of the liquid lithium divertor target for particle pumping.	09/30/09	On schedule
AF(09-1)*	Operate NSTX Facility for 5 additional Experimental Run Weeks	09/30/09	On schedule
D(09-1)	Upgrade the divertor bolometer to three views with 20 channels.	09/30/09	On schedule
D(09-2)	Complete fabrication of the Beam Emission Spectroscopy system for transport studies.	09/30/09	On schedule
AD(09-1)*	Complete engineering design of MPTS Extra Channels.	09/30/09	On schedule

\* ARRA related milestones