Update on Planning for 2008 NSTX Run

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Wave-Particle Interaction
Topical Science Group Meeting
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Additional Funding Supports 18 Week Campaign

NSTX

- NSTX run-time for FY08 will apparently increase to 18 weeks total = 90 run days as a result of additional funding
- 1/3 of run-time will be reserved (not allocated) for later in run
- The revised allocated run-time guidance for 60 run days is:
  - Boundary Physics --> 11 days
  - Transport & Turbulence --> 12 days
  - Macrostability --> 11 days
  - Wave-Particle Ineraction --> 9 days
  - Solenoid Free Startup --> 9 days
  - Advanced Scenarios Control --> 8 days
- 20 days assigned following the "mid-run" assessment
- 10 days for calibration, comissioning, cross-cutting & enabling, etc.

XP Reviews Starting Now, ISTP Next Week, Run Begins January 21st

NSTX

- Roger Raman (Deputy RC) wants to start final review of XPs now - What WPI XPs are ready for review?
- Machine ISTP January 14-16
- Control system checkout & first plasma January 17
- Diagnostics checkout January 18
- MSE calibration & boronization January 21
- FIDA XMP January 22
- HHFW conditioning XMP January 28 & February 13
- Need to revisit XP priorities and run time allocation given additional WPI TSG run time

Energetic Particle Experiments

- EP transport by TAE avalanches & EPMs - 2 days [1]
  - Fredrickson, Heidbrink, Podesta & Darrow
- Alfvén cascades & associated transport - 1 day [1]
  - Crocker & Fredrickson
- Measurement of BAAE & TAE RSAE mode structure with high-k scattering - (0.5)* days [2] - Lee & Gorelenkov
- Vertical NPA scan - (0.5)* days [2] - Medley
- 2-3 hours of XMP time to commission FIDA diagnostic - Heidbrink

[ ] = priority * ( ) = days assuming 7.5 day allocation

HHFW & EBW Experiments

- HHFW phase scan & CD in D L-mode - 1 day [1] - Hosea & Ryan
- HHFW phase scan CD in D NBI H-mode - 1 (1.5)* days [1]
  - Ryan, Hosea & Heidbrink
- HHFW coupling into I_p ramp at I_p ~ 200kA - 0.5 days [2]
  - Hosea, Ryan & Taylor
- HHFW loading at < 200 kW D NBI H-mode - piggyback [2] - Ryan
- Optimize EBW emission coupling in H-mode - 0.5 days [1] - Taylor
- 2 day XMP to condition HHFW in D plasmas: - Ryan & Hosea
  - Includes Low P_{rf} HHFW coupling to measure sheath loss - XMP [2] - Ryan

[ ] = priority * ( ) = days assuming 7.5 day allocation