

**National Spherical Torus Experiment  
Program Advisory Committee  
19th Meeting**

**Princeton Plasma Physics Laboratory  
Conference Room LSB-318  
February 22-24, 2006**

**CHARGE**

There has been substantial progress towards an international Joint Implementing Agreement for ITER, resulting in the formation of the US Burning Plasma Organization and increased focus on ITPA Joint Experiments. The recent FESAC Facilities Panel Report identified key areas in which NSTX can make unique, important contributions to the science basis for ITER. The report also identified unique, important information that NSTX can provide in support of a compact U.S. Component Test Facility. It is critical that NSTX research plans support both burning plasma physics and the development of the ST configuration. Fortunately there is very substantial overlap between these goals.

NSTX has recently added critical new capability, including a unique system for highly localized high-k scattering measurements, active control of RWM coils in a configuration similar to that proposed for ITER, and intense lithium coating.

- 1) Do the proposed research plans for FY2006-08 take appropriate advantage of the new capabilities of NSTX to address both burning-plasma and ST-specific scientific goals?
- 2) Do the proposed facility and diagnostics upgrades for the FY2006-08 time frame position NSTX to maximize its contributions, given financial constraints?

## AGENDA

### Wednesday, February 22, 2006

- 1:00 Coffee & Donuts, PAC Executive Session  
1:15 Rob Goldston Welcome and Charge to the PAC  
1:25 Steve Eckstrand Comments from DOE  
1:30 Jim VanDam Agenda and Plan of Meeting  
1:35 **Jon Menard** **FY05 Campaign and Milestone Accomplishments**  
2:35 **Martin Peng** **Strategic Goals & Research Priorities**  
(3:00 Coffee)  
3:20 **Masa Ono** **Facility Plans**  
4:05 PAC Executive Session  
6:05 Adjourn  
7:00 PAC Dinner TBD

### Thursday, February 23, 2006

- 8:00 Coffee & Donuts  
8:30 Jim VanDam Feedback and Questions  
8:40 **Stan Kaye** **Confinement Scaling and ITER Relevance**  
9:10 **Mike Bell** **Turbulence and Transport**  
9:40 **Aaron Sontag** **Macro-stability**  
10:20 Coffee  
10:30 **Eric Fredrickson** **Super-Alfvénic Ion Driven Instabilities and Transport**  
11:10 **Gary Taylor** **EBW and HHFW (include Pegasus)**  
11:50 Lunch  
12:50 **Dennis Mueller** **Transient CHI**  
1:20 **Henry Kugel** **Lithium Wall Coating and Recycling Control**  
1:45 **Rajesh Maingi** **Boundary Physics**  
2:30 **Dave Gates** **Toward Stable Steady State Operation (include rampup)**  
3:10 Coffee  
3:20 **Roger Raman** **Run Plan for FY06**  
4:00 PAC Executive Session  
6:00 Adjourn

### Friday, February 24, 2006

- 8:30 Coffee & Donuts  
8:40 Jim VanDam Feedback and Questions  
8:50 PAC Executive Session  
(10:00 Coffee)  
(12:00 Lunch)  
1:00 Jim VanDam Debriefing  
1:30 Adjourn