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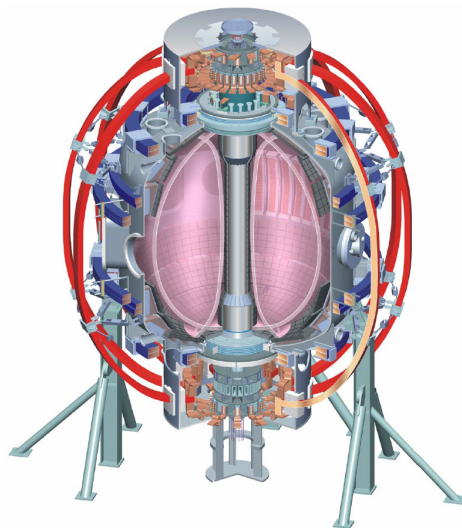
NSTX

NSTX Program

Martin Peng
On Behalf of the NSTX Team

NSTX Team Meeting
February 8, 2006

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
SNL
Think Tank, Inc.
UC Davis
UC Irvine
UCLA
UCSD
U Colorado
U Maryland
U Rochester
U Washington
U Wisconsin



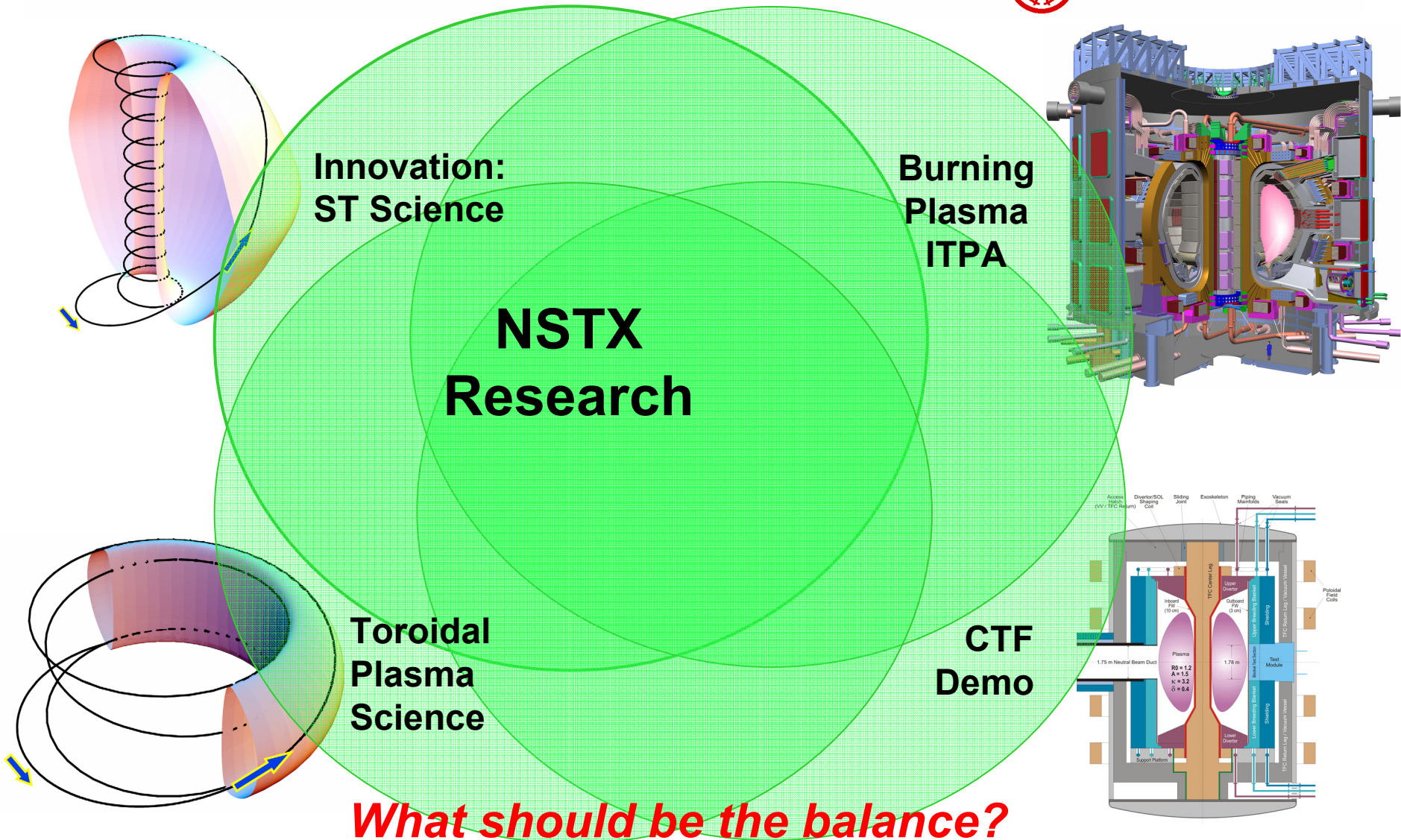
Culham Sci Ctr
U St. Andrews
York U
Chubu U
Fukui U
Hiroshima U
Hyogo U
Kyoto U
Kyushu U
Kyushu Tokai U
NIFS
Niigata U
U Tokyo
JAERI
Hebrew U
Ioffe Inst
RRC Kurchatov Inst
TRINITI
KBSI
KAIST
ENEA, Frascati
CEA, Cadarache
IPP, Jülich
IPP, Garching
ASCR, Czech Rep

Topics of Interest to Team

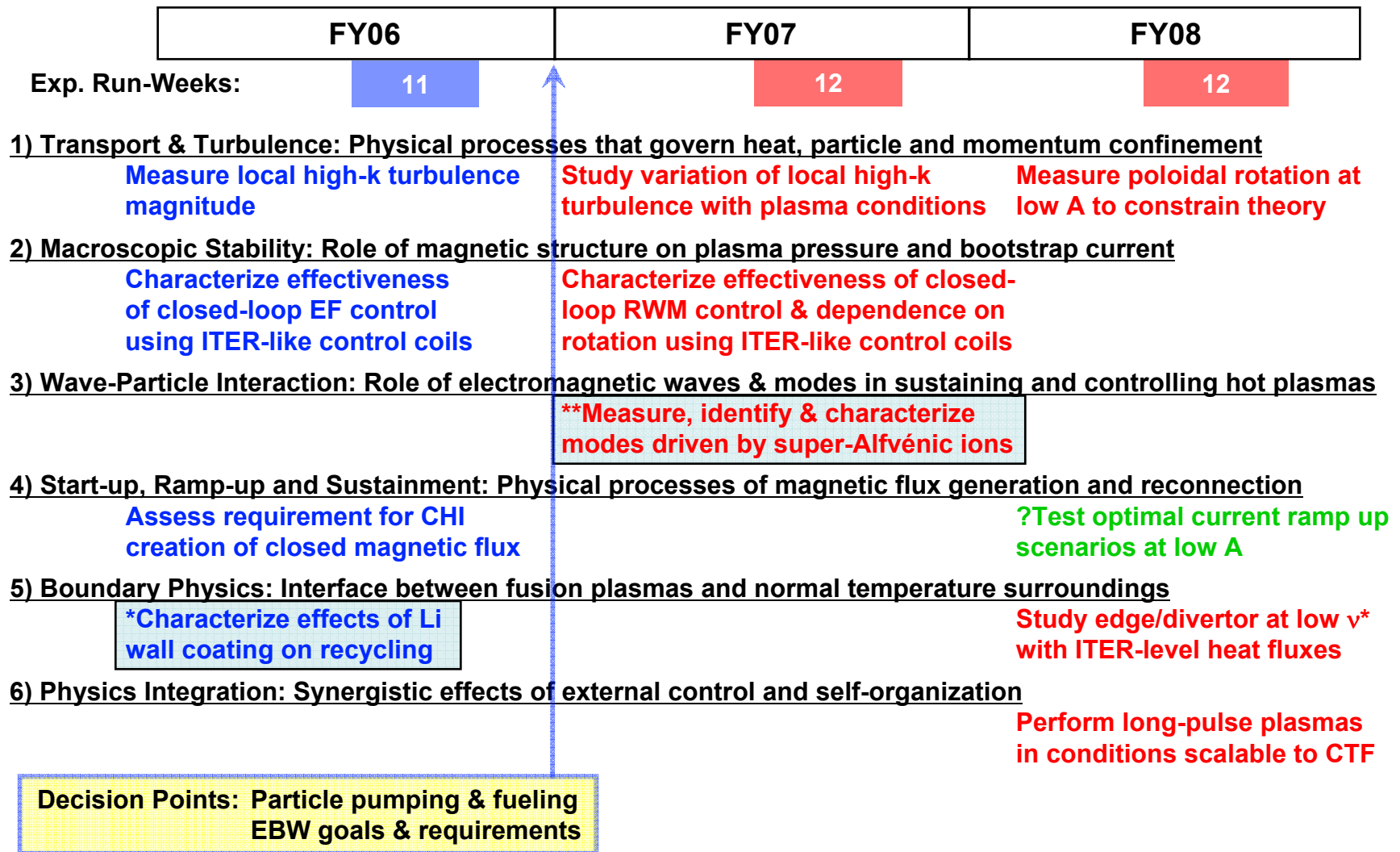


- Program Mission and Research Priorities
- NSTX Diagnostic Research Collaboration – DOE Selection
- Upcoming Meetings

NSTX Research Priorities Emphasize Multiple Contributions to Major Fusion Program Directions



Research Milestones for FY06-08 Are Being Selected to Maximize Contributions to NSTX Missions



*OFES "Tracked" Milestone

**DOE "JOULE" Milestone

DOE Has Selected Winners for Diagnostic Collaboration 3/06-2/09



- JHU Finkenthal
- Nova Liventon
- UC Davis Luhmann
- UCI Heidbrink
- UCLA Peebles
- UCSD Boedo

Upcoming Meetings



- NSTX PAC-19: 2/22-24/06
 - Dry runs during 2/10,13,14,15
- OFES Budget Planning Meeting: 3/14-15/06

PAC-19 Charge

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?

PAC-19 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