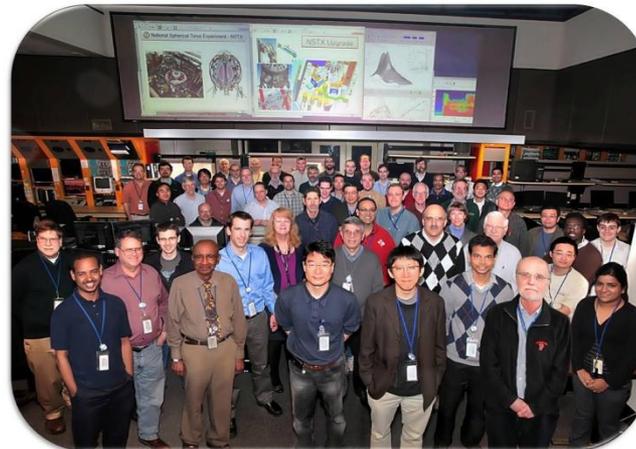
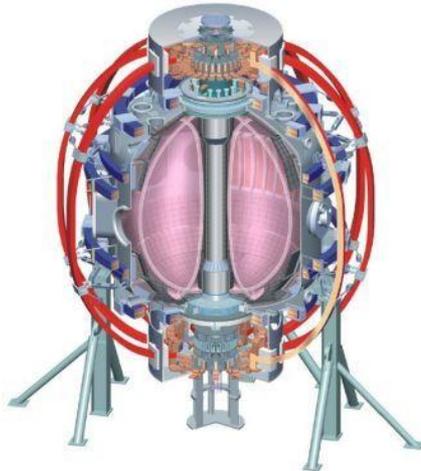


Intro and Agenda for ITER/Cross-cutting TSG Group Reviews

J. Menard, R. Maingi, A. Boozer

Columbia U
CompX
General Atomics
FIU
INL
Johns Hopkins U
LANL
LLNL
Lodestar
MIT
Nova Photonics
New York U
ORNL
PPPL
Princeton U
Purdue U
SNL
Think Tank, Inc.
UC Davis
UC Irvine
UCLA
UCSD
U Colorado
U Illinois
U Maryland
U Rochester
U Washington
U Wisconsin

ITER/CC TSG Group Reviews
B233
June 22, 2011



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
TRINITI
NFRI
KAIST
POSTECH
ASIPP
ENEA, Frascati
CEA, Cadarache
IPP, Jülich
IPP, Garching
ASCR, Czech Rep

ITER/CC XPs sorted by run-year, with piggybacking

XP #	FY11	FY12	#	Presenter	Title	Category	Total
1124	X		5	John Canik	Impact of 3-D fields on pedestal profiles without and with lithium	R11-4 - edge transport	0.5
			7	Aaron Sontag	Effect of collisionality on edge stability and transport	R11-4 - edge transport	✓ - PB with 2 and 3, PB o
			8	Ahmed Diallo, John Canik	Characterization of the Edge Profile Response Induced by Perturbations on the n=3 Static Fields	R11-4 - edge transport	PB
			10	G.R. McKee, R.J. Fonck, D.R. Smith	Impact of 3D radial field perturbations on turbulence, pedestal transport and ELMs	R11-4 - edge transport	PB
1125	X		9	Dan Clayton, Kevin Tritz, Dan Stutman, Dee	Effects of 3D Fields on Impurity Transport in the NSTX Plasma Edge	R11-4 - edge transport	0.75
			22	Jong-Kyu Park	ELM suppression in low q95 target plasmas	R11-4 - edge stability	PB - lead with 9
			14	S. Kubota	Effect of 3-D Fields on Particle Transport	R11-4 - edge transport	PB
			10	G.R. McKee, R.J. Fonck, D.R. Smith	Impact of 3D radial field perturbations on turbulence, pedestal transport and ELMs	R11-4 - edge transport	PB
1126	X		15	Joon-Wook Ahn	Density pumpout in L-mode plasmas	R11-4 - edge transport	0.5
			9	Dan Clayton, Kevin Tritz, Dan Stutman, Dee	Effects of 3D Fields on Impurity Transport in the NSTX Plasma Edge	R11-4 - edge transport	
			10	G.R. McKee, R.J. Fonck, D.R. Smith	Impact of 3D radial field perturbations on turbulence, pedestal transport and ELMs	R11-4 - edge transport	PB
1127	X		20	Jeremy Lore	Search for q95 resonant effects on ELM frequency during 3D field application	R11-4 - edge stability	0.75
			19	Richard Buttery	Try Zero Shear Rational q Model for RMP ELM Suppression	R11-4 - edge stability	PB on 20, 23
			10	G.R. McKee, R.J. Fonck, D.R. Smith	Impact of 3D radial field perturbations on turbulence, pedestal transport and ELMs	R11-4 - edge transport	PB
1128	X		21	Jong-Kyu Park	ELM triggering test using the n=1 or n=2 field	R11-4 - edge stability	0.5
			17	Joon-Wook Ahn	Effect of separatrix splitting on the ELM triggering threshold	R11-4 - edge stability	
			10	G.R. McKee, R.J. Fonck, D.R. Smith	Impact of 3D radial field perturbations on turbulence, pedestal transport and ELMs	R11-4 - edge transport	PB
1031	X		23	S.A. Sabbagh, T.E. Evans, L. Zakharov	ELM stability dependence on edge current, q, and collisionality	R11-4 - edge stability	0.25
			11	Michael Jaworski	SOL modifications due to 3D fields and evaluation of baffle-probes for cross-field transport monitoring	R11-4 - edge transport	PB
			19	Richard Buttery	Try Zero Shear Rational q Model for RMP ELM Suppression	R11-4 - edge stability	PB on 20, 23
			10	G.R. McKee, R.J. Fonck, D.R. Smith	Impact of 3D radial field perturbations on turbulence, pedestal transport and ELMs	R11-4 - edge transport	PB
1129	X		25	Rajesh Maingi	Combination of applied 3-D fields and snowflake divertor for impurity control	impurity reduction	0.5
1131	X		27	J. Menard	Early H mode impurity confinement reduction combined with snowflake for impurity and density control	impurity reduction	1
			X	18	Devon Battaglia, Morgan Shafer	Edge island imaging and ELM stability modification using a vertically shifted plasma	R11-4 - edge stability
1121	X		1	Vlad Soukhanovskii	Experiments to support NSTX-U divertor PFC design and operation	NSTX-U support	0.5
1122	X		2	Stefan Gerhardt	Passive impurity control techniques in NSTX-U scenarios	NSTX-U support (DN SFD	0.5
			3	Travis Gray	Development of small ELM regime with minimal lithiumization for edge particle control	combine with Gerhardt n	PB
			7	Aaron Sontag	Effect of collisionality on edge stability and transport	R11-4 - edge transport	✓ - PB with 2 and 3, PB o
1123	X		4	John Canik	X-point height scan at fixed strike point radius	NSTX-U support	0.5
1130	X		26	Amanda Hubbard	Access and characterization of Imode regime on NSTX	impurity reduction	0.5
1132	X		28	John Canik	Combining ELM pacing with RF for edge and core impurity control	impurity reduction	0.5
			29	John Canik	ELM pacing at reduced frequency combined with divertor gas puff	impurity reduction	
			30	John Canik	ELM pacing with combined n=3 fields and vertical jogs VJ during lithiumized ELM-free discharges	impurity reduction	
			16	Joon-Wook Ahn	Effect of 3-D fields on the radiative/detached divertor plasmas	Additional ITER support	0.5

Overview

- For this meeting we will focus on 4 XPs exploring the effects of 3D fields on (primarily) edge transport and turbulence
- Major goal is to look for overlap - especially in the target plasmas - and find ways of maximizing data/information gotten from this limited set of shots.

Issues to consider for each XP idea

- Summary of physics that will be addressed
- Incorporation of needs/desires of the experiments piggybacking on the one you are leading
- Plasma/diagnostic/machine capability requirements
- Draft shot plan

Agenda

- ✓ 1. Introduction – J. Menard
2. XP1124 - J. Canik - "Impact of 3-D fields on pedestal profiles without and with lithium" (Sontag, Diallo, Smith/McKee)
3. J.K. Park - Scalings of particle transport from 3D fields
4. XP1125 - D. Clayton and J.K. Park - "Effects of 3D Fields on Impurity Transport in the NSTX Plasma Edge" (Kubota, Smith/McKee)
5. XP1126 – J.-W. Ahn - "Density pumpout in L-mode plasmas" with (Clayton - impurity transport, Smith/McKee - BES)
6. Summarize action items for XPs 1124-1126
7. XP1129 - R. Maingi - "Combination of applied 3-D fields and snowflake divertor for impurity control"