

Eighteenth Meeting of the ITPA Topical Group on Diagnostics Oak Ridge 11-14 May 2010

A G E N D A

Tuesday 11 May

Progress Meeting on ITER relevant diagnostic developments in the US

8:00	Registration and Coffee	
	<i>Chair: J. Terry</i>	
8:50	General Information – Logistics and Welcoming Words	D. Hillis
9:00	Overview of US ITER Diagnostic Activities (30'+10')	D. Johnson
9:40	Port Engineering Update (15'+5')	R. Feder
10:00	<i>Coffee/Tea Break</i>	
10:15	Design Issues of the ITER Low Field Side Reflectometer (25'+5')	T. Peebles
10:45	Analysis of the ITER LFS Reflectometer Transmission Line System (15'+5')	G. Hanson
11:10	RF source for the ITER LFS Reflectometer (15'+5')	S. Jones
11:30	Conceptual Design and Status of the ITER Residual Gas Analyzers (15'+5')	W. Gartner
12:00	<i>Lunch</i>	
	<i>Chair: D. Johnson</i>	
13:00	Accuracy and Resolution of ECE Measurements on ITER (25'+5')	M. Austin
13:30	Prospects of combined magnetic field, temperature and density profile measurements on tokamaks using Pulsed Polarimetry (25'+5')	R. Smith
14:00	Progress report on the TIP and Divertor Interferometer Systems (25'+5')	D. Brower
14:30	Ion Temperature Measurements with the Core Imaging X-ray Spectrometer (25'+5')	P. Beirsdorfer
15:00	Experience of B Stark on DIII-D (15'+5')	R. Boivin for N. Pablant
15:30	<i>Coffee/Tea Break and picture</i>	
16:00	Tour of SNS (1 hr)	
17:00	<i>Adjourn</i>	

18th Meeting of the ITPA Topical Group on Diagnostics

Wednesday 12 May

08:30	<i>Welcoming Words</i>	R. Boivin
	<i>General introductory presentations - Chair: R. Boivin</i>	
08:40	Progress with ITER diagnostics and ITER diagnostic needs (35'+5')	G. Vayakis
09:30	Action Items + IAEA paper	R. Boivin
10:00	<i>Coffee/Tea Break</i>	
	<i>HP: Development of methods of measuring the energy and density distribution of confined and escaping α's - Chair: M. Beurskens</i>	
10:15	Development and irradiation test of lost alpha detection system for ITER (15'+5')	M. Nishiura
10:35	Background Estimation of the in-port gamma detector for lost alpha measurement. (15'+5')	M. Sasao
11:00	Discussion	
12:00	<i>Lunch</i>	
	<i>HP: Development of measurement requirements for measurements of hot dust, and assessment of techniques for measurement of hot dust – Chair: R. Boivin</i>	
13:00	CO2 Laser Digital Holography: Possible ITER Erosion Diagnostic (20'+5')	T. Thomas
13:25	Update from the IO (15'+5')	R. Reichle
13:45	Discussion	
	<i>HP: Assessment of the neutron calibration strategy and calibration source strength needed -Chair: Q. Yang</i>	
14:15	Recent progress on in-vessel neutron diagnostics (15'+5')	M. Ishikawa
14:35	Neutron Working Group Report and Summary of IWFP (25'+5')	M. Sasao
15:05	Discussion	
15:30	<i>Coffee/Tea Break</i>	
	<i>HP: Assessment of the impacts of in-vessel wall reflections on diagnostics – Chair: N. Hawkes</i>	
15:45	ECRH Stray Radiation Experiments for W7-X (15'+5')	R. König
16:15	Progress on stray light simulations for ITER diagnostics (25'+5')	D. Thomas
16:45	Discussion	
17:30	Adjourn	
18:30	<i>Banquet</i>	
20:00	<i>Presentation: A glimpse of the future</i>	

Thursday 13 May

	HP: Progress in the field of first mirrors - Chair: C. Ingesson	
08:30	Report of the First Mirror Working Group (25' + 5')	A. Litnovsky
09:00	Comprehensive First Mirror Test for ITER at JET (20'+5')	M. Rubel
09:30	Recent progress of retroreflector on LHD (10'+5')	T. Akiyama
09:45	Coffee/tea break	
10:00	Discussion (FM)	
11:00	Update on Bolometry and Upper Port VIS/IR diagnostics (20'+5')	R. Reichle
11:30	Divertor heat-flux measurements using IR thermography on C-Mod - Similarities to ITER (25' + 5')	J. Terry
12:00	Lunch	
	Party Reports on ITER Relevant Diagnostic Developments - Chair: Y. Kawano	
13:00	<i>Developments in China (15'+5')</i>	Q. Yang
	<i>Developments in EU</i>	
13:30	EFDA TG on diagnostics activities (25'+5')	A. Murari (for A.H. Donné)
14:00	Diagnostic developments for the operation of JET with the ITER-like wall (25'+5')	A. Murari
14:30	Fusion for Energy (F4E) diagnostic workprogrammes 2010-2011 (10'+5')	C. Ingesson
14:45	ITER relevant diagnostics activity at FTU (10'+5')	R. de Angelis
15:00	Coffee/Tea Break	
15:15	Experience with gamma-ray spectroscopy with a LaBr3 scintillator detector and digital data acquisition (10'+5')	G. Gorini
15:30	Cross section data requirements for gamma-ray spectroscopy in fusion: the case of $^{12}\text{C}(^3\text{He}, p)^{14}\text{N}$ reaction (10'+5')	G. Gorini
	Party Reports on ITER Relevant Diagnostic Developments- 2 – Chair: D. Brower	
	<i>Developments in India</i>	
	<i>Developments in Japan</i>	
16:00	Progress in ITER Diagnostics Development in Japan (25'+5')	Y. Kawano/Y. Kusama
16:30	Progress in the design of the plasma diagnostics for JT-60SA (15'+5')	K. Itami
17:00	Progress report on development of the He0 diagnostic beam for confined alpha measurements (15'+5')	M. Sasao
	<i>Developments in Korea</i>	
	<i>Developments in Russia</i>	
17:30	Adjourn	

Friday 14 May

	<i>Progress and Plans for the Specialist Working Groups - Chair: G. Vayakis</i>	
08:30	<i>Working Group on Laser-aided diagnostics (40'+5')</i>	M. Beurskens
09:15	Bench testing of a dispersion interferometer (15'+5')	T. Akiyama
09:35	In-situ calibration of the spectral transmissivity of Thomson scattering meas. (15'+5')	E. Yatsuka
10:00	Coffee/tea break	
10:30	<i>Working Group on Active Spectroscopy (15'+5')</i>	N. Hawkes
11:00	<i>Working Group on Microwave Diagnostics (25' + 5')</i>	M. Austin
11:30	<i>Working Group on Passive Spectroscopy (15' + 5')</i>	?
12:00	Lunch	
13:00	<i>Working Group on First Wall Diagnostics (20'+5')</i>	R. Reichle
13:30	<i>Working Group on Radiation Effects</i>	?
14:30	Review of Action Items	R. Boivin
15:00	Coffee/Tea Break	
15:30	Forthcoming meetings (Date 19 th meeting, Location 20 th meeting)	R. Boivin
16:00	Executive Summary of the Meeting	R. Boivin
17:00	Meeting end	