23rd IAEA Fusion Energy Conference

PROGRAMME COMMITTEE

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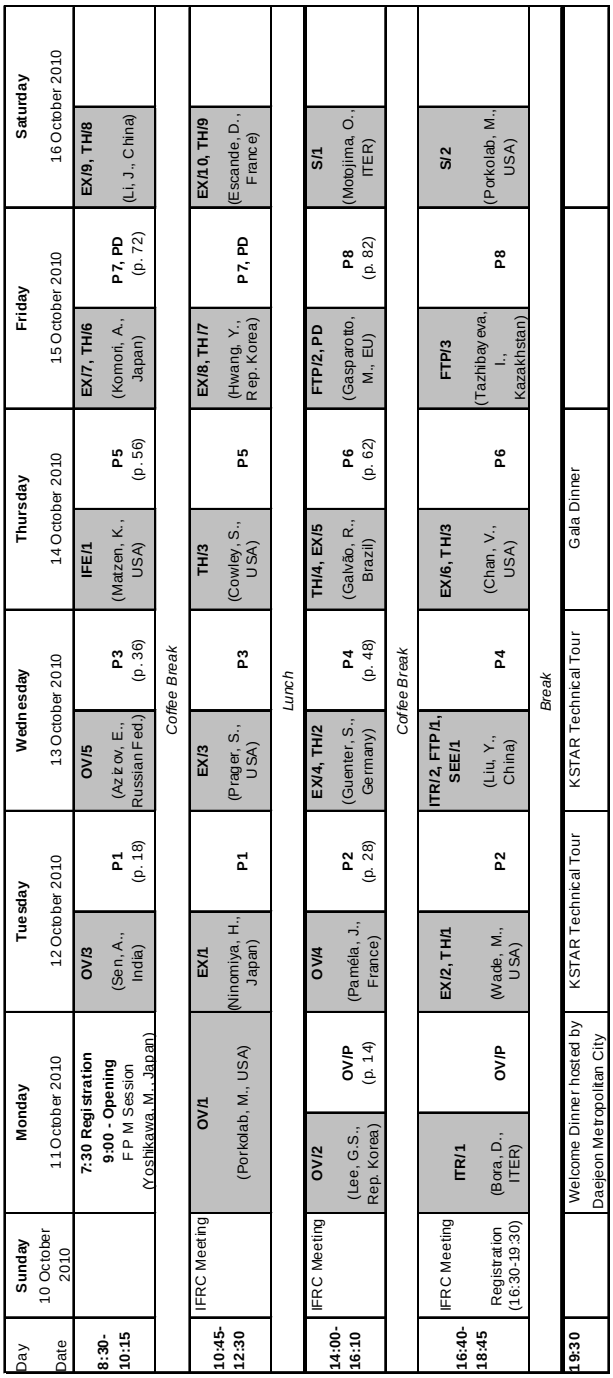

Day / Date	Sunday 10 October 2010	Monday 11 October 2010	Tuesday 12 October 2010		Wednesday 13 October 2010		Thursday 14 October 2010		Friday 15 October 2010		Saturday 16 October 2010	
8:30-10:15		**7:30 Registration** **9:00 - Opening** F P M Session (Yoshikawa, M., Japan)	**OV/3** (Sen, A., India)	**P1** (p. 18)	**OV/5** (Azizov, E., Russian Fed.)	**P3** (p. 36)	**IFE/1** (Matzen, K., USA)	**P5** (p. 56)	**EX/7, TH/6** (Komori, A., Japan)	**P 7, PD** (p. 72)	**EX/9, TH/8** (Li, J., China)	
		Coffee Break										
10:45-12:30	IFRC Meeting	**OV/1** (Porkolab, M., USA)	**EX/1** (Ninomiya, H., Japan)	**P1**	**EX/3** (Prager, S., USA)	**P3**	**TH/3** (Cowley, S., USA)	**P5**	**EX/8, TH/7** (Hwang, Y., Rep. Korea)	**P 7, PD**	**EX/10, TH/9** (Escande, D., France)	
		Lunch										
14:00-16:10	IFRC Meeting	**OV/2** (Lee, G.S., Rep. Korea)	**OV/4** (Paméla, J., France)	**P2** (p. 28)	**EX/4, TH/2** (Guenter, S., Germany)	**P4** (p. 48)	**TH/4, EX/5** (Galvão, R., Brazil)	**P6** (p. 62)	**FTP/2, PD** (Gasparotto, M., EU)	**P8** (p. 82)	**S/1** (Motojima, O., ITER)	
		Coffee Break										
16:40-18:45	IFRC Meeting Registration (16:30-19:30)	**ITR/1** (Bora, D., ITER)	**OV/P**		**EX/2, TH/1** (Wade, M., USA)	**P2**	**ITR/2, FTP/1, SEE/1** (Liu, Y., China)	**P4**	**EX/6, TH/3** (Chan, V., USA)	**P6**	**FTP/3** (Tazhibayeva, I., Kazakhstan)	**P8**	**S/2** (Porkolab, M., USA)	
		Break										
19:30		Welcome Dinner hosted by Daejeon Metropolitan City	K-STAR Technical Tour		K-STAR Technical Tour		Gala Dinner					

IAEA SECRETARIAT:

Scientific Secretaries: G. Mank
R. Kamendje

Conference Coordination: K. Morrison
M. Khaelss

LOCATION OF THE CONFERENCE:

Daejeon Convention Center
4-19 Doryoung-dong, Yuseong-gu,
Daejeon, Republic of Korea

LOCAL ORGANIZATION:

Host Government Liaison Officer:
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Big Science Foundation Division
Ministry of Education, Science and Technology
Seoul, Republic of Korea

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WORKING LANGUAGE: English

RESOLUTIONS: No resolutions may be submitted for consideration on any subject, no votes will be taken.

EXPLANATION OF ABBREVIATIONS

OV Overview

EX Magnetic Confinement Experiments

C: Confinement

S: Stability

W: Wave–plasma interactions – current drive, heating, energetic particles

D: Plasma–material interactions – divertors, limiters, SOL

TH Magnetic Confinement Theory and Modelling

C: Confinement

S: Stability

W: Wave–plasma interactions – current drive, heating, energetic particles

D: Plasma–material interactions – divertors, limiters, SOL

ITR ITER Activities

IFE Inertial Fusion Experiments and Theory

ICC Innovative Confinement Concepts

FTP Fusion Technology and Power Plant Design

SEE Safety, Environmental and Economic Aspects of Fusion

PD Post-deadline

ORAL SESSIONS INDEX

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	Fusion Pioneers Memorial Session		
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TUESDAY, 12 October 2010			
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THURSDAY, 14 October 2010			
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LIST OF CONTRIBUTIONS

1	Pioneers Memorial Session lecture
22	Overview talks
7	Overview posters
86	Regular talks (21 Rapporteured papers)
468	Regular Poster presentations
2	Post deadline talks
5	Post deadline posters
5	Summary talks

EXPLANATIONS/REQUESTS

Overview posters will be exhibited throughout the duration of the conference.

All oral presentations will be displayed during the poster sessions following the plan printed at the end of this booklet.

The duration of the oral presentation indicated in the programme includes the estimated discussion time. The speakers are requested to make available the following times for discussions:

25' Overview presentation includes 4' discussion time
20' Regular oral includes 3' discussion time

Rapporteur papers are identified by the letter "a" after the paper number. Rapporteured papers are identified by the letters "b,c,…" after the paper number.

PARTICIPATION IN IAEA SCIENTIFIC MEETINGS

Governments of Member States and those organizations whose activities are relevant to the meeting subject matter are invited to designate participants in the IAEA scientific conferences and symposia. In addition, the IAEA itself may invite a limited number of scientists as invited speakers. Only participants designated or invited in this way are entitled to present papers and take part in the discussions.

Representatives of the press, radio, television or other information media and members of the public, the latter as "observers", may also be authorized to attend, but without the right to take part in the proceedings.

Scientists interested in participating in any of the IAEA meetings should request information from the Governmental authorities of their own countries, in most cases the Ministry of Foreign Affairs or National Atomic Energy Authority.

CONFERENCE PROCEEDINGS

The papers will be published by the IAEA as unedited proceedings in electronic format on CD-ROM and on the IAEA Physics Section web site by March 2011: http://www-naweb.iaea.org/iaea.org/napc/physics/index.htm.

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Sunday, 10 October 2010

16:30 – 19:30	**Registration**	**Daejeon Convention Centre**

Monday, 11 October 2010

MORNING SESSIONS

09:00-10:25 **Opening Session:**
Welcome/Fusion Pioneers Memorial
Chair: Yoshikawa, M. (Japan)

Opening performance: Sand Performance
FEC 2010 theme film: Lee, G.S., Republic of Korea

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
O/1	Burkart, W.	IAEA		Opening Address
O/2	Lee, J.H.	Republic of Korea		Welcome Address
O/3	Honorary Host Country Representative	Republic of Korea		Welcome Address
FPM/1	Razumova, K.	Russian Federation	30	Another look at tokamak plasma physic

10:45 - 12:30 **Session OV/1: Overview-I**
Chair: Porkolab, M. (USA)

OV/1-1	Kwon, M.	Republic of Korea	25	Overview of KSTAR Initial Experiments
OV/1-2	Wan, B.N.	China	25	Recent Progress in High Power Heating and Long Pulse Experiments on EAST
OV/1-3	Romanelli, F	European Commission	25	Overview of JET Results
OV/1-4	Greenfield, C.M.	USA	25	DIII-D Contributions Toward the Scientific Basis For Sustained Burning Plasmas

Monday, 11 October 2010

AFTERNOON SESSIONS

14:00-16:10 **Session OV/2: Overview-II**
Chair: Lee, G.S. (Republic of Korea)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
OV/2-1	Lindl, J.D.	USA	25	Progress toward ignition on the National Ignition Facility
OV/2-2	Motojima, O.	ITER	25	Progress in ITER Construction
OV/2-3	Isayama, A.	Japan	25	Overview of JT-60U Results Toward the Resolution of Key Physics and Engineering Issues in ITER and JT-60SA
OV/2-4	Raman, R.	USA	25	Overview of Physics Results from NSTX
OV/2-5	Yamada, H.	Japan	25	Overview of Results from the Large Helical Device

16:40-18:45 **Session ITR/1: ITER**
Chair: Bora, D. (ITER)

ITR/1-1	Bak, J.S.	Republic of Korea	20	Preparations of the ITER Vacuum Vessel Construction
ITR/1-2	Wagner, F.	Germany	20	Optimizing the ITER Heating and Current Drive Mix
ITR/1-3	Schaffer, M.J.	USA	20	ITER Test Blanket Module Error Field Simulation Experiments at DIII-D
ITR/1-4	Loarte, A.	ITER	20	ITER ELM control requirements, ELM control schemes and required R&D
ITR/1-5	Luce, T.C.	USA	20	Development of Advanced Inductive Scenarios for ITER
ITR/1-6	Putvinski, S.	ITER	20	Disruption Mitigation in ITER

Monday, 11 October 2010

AFTERNOON POSTER SESSIONS

14:00-18:45 Poster Session OV/P: Overview Posters
All Overview Presentations display poster in this session
(Overview displays all week)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
OV/P-1	Blackwell, B.D.	Australia	The Australian Plasma Fusion Research Facility: Recent Results and Upgrade Plans
OV/P-2	Coppi, B.	Italy	Near Term Perspectives for Fusion Research and New Contributions by the Ignitor Program
OV/P-4	Ishida, S.	Japan	Overview of the JT-60SA Project
OV/P-5	Jung, K.J.	Republic of Korea	Overview of the ITER Korea Procurement Activities
OV/P-6	Kruglyakov, E.P.	Russian Federation	Progress in studies of magnetic mirror and their prospects.
OV/P-7	Vershkov, V.A.	Russian Federation	Recent Results of T-10 Tokamak
OV/P-8	Zhuang, G.	China	The Reconstruction and Research Progress of the TEXT-U Tokamak in China

Tuesday, 12 October 2010

MORNING SESSIONS

8:30-10:15 **Session OV/3: Overview-III**
Chair: Sen, A. (India)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
OV/3-1	Kallenbach, A.	Germany	25	Overview of ASDEX Upgrade results
OV/3-2	Marmar, E.S.	USA	25	Overview of Recent Results from Alcator C-Mod including Applications to ITER Scenarios
OV/3-3	Lloyd, B.	United Kingdom	25	Overview of Physics Results from MAST
OV/3-4	Saoutic, B.	France	25	Contribution of Tore Supra in preparation of ITER

10:45 - 12:30 **Session EX/1: Scenario Development**
Chair: Ninomiya, H. (Japan)

EX/1-1	Joffrin, E.H.	France	20	High confinement hybrid scenario in JET and its significance for ITER
EX/1-2	Garofalo, A.M.	USA	20	Advances Toward QH-mode Viability for ELM-Free Operation in ITER
EX/1-3	Whyte, D.G.	USA	20	I-mode: An H-mode energy confinement regime with L-mode particle confinement on Alcator C-Mod
EX/1-4	Mailloux, J.	United Kingdom	20	Towards a Steady-State Scenario with ITER Dimensionless Parameters in JET
EX/1-5	Morisaki, T.	Japan	20	Progress of Superdense Plasma Research in LHD: Sustainment and Transport Study

Tuesday, 12 October 2010

MORNING POSTER SESSIONS

08:30-12:30 Poster Session P1: ITER Fusion Technology

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
ITR/P1-01	Afanasyev, V.I.	Russian Federation	Neutral Particle Analysis on ITER: Present Status and Prospects
ITR/P1-02	Boivin, R.L.	USA	R&D ITPA Activities in Support of Optimizing ITER Diagnostic Performance
ITR/P1-03	Chugunov, I.	Russian Federation	Development of Gamma-ray Diagnostics for ITER
ITR/P1-04	Lee, H.G.	Republic of Korea	Status of Design and R&D for the Korean ITER Diagnostic Systems
ITR/P1-05	Litnovsky, A.	Germany	Mirrors for ITER diagnostics: new R&D developments, assessment of the mirror lifetime and impact of the mirror failure on ITER performance
ITR/P1-06	Mukhin, E.E.	Russian Federation	First Optics in ITER: Material Choice and Deposition Prevention/Cleaning Techniques
ITR/P1-07	Walsh, M.J.	ITER	Overview of high priority ITER Diagnostic systems status
ITR/P1-08	Bazylev, B.	Germany	Simulations of Material Damage and high Energy Fluxes to ITER Divertor and First Wall during Transients and Runaway Electron Loads
ITR/P1-09	Callis, R.W.	USA	Testing of ITER-Class ECH Transmission Line Components at the JAEA Radio-Frequency Test Stand
ITR/P1-10	Henderson, M.A.	ITER	An overview of the ITER EC H&CD system and functional capabilities
ITR/P1-11	Mayoral, M.L.	United Kingdom	On Maximizing the ICRF Antenna Loading for ITER plasmas
ITR/P1-12	Schreck, S.	Germany	Prototype Manufacturing and Testing of Components of the ECH Upper Launcher for ITER
ITR/P1-13	Sonato, P.	Italy	The ITER Neutral Beam Test Facility in Padua – Italy: a joint international effort for the development of the ITER heating neutral beam injector prototype
ITR/P1-14	Suzuki, T.	Japan	Experimental Investigation And Validation of Neutral Beam Current Drive for ITER through ITPA Joint Experiments
ITR/P1-15	Tobari, H.	Japan	Development of Full-size Mockup bushing for 1 MeV ITER NB system
ITR/P1-16	Bandyopadhyay, L.	India	TSC modelling of major disruption and VDE events in NSTX and ASDEX-Upgrade and predictions for ITER
ITR/P1-17	Blackler, K.	ITER	ITER Machine Assembly - Status & Plans
ITR/P1-18	Bora, D.	ITER	Progress on the development of the ITER Control System
ITR/P1-19	Casper, T.A.	ITER	Development of the ITER Baseline Inductive Scenario

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
ITR/P1-20	Imbeaux, F.	France	Current ramps in tokamaks : from present experiments to ITER scenarios
ITR/P1-21	Kakudate, S.	Japan	Progress in development of the blanket remote handling system for ITER
ITR/P1-22	Kessel, C.E.	USA	Development of ITER Advanced Hybrid and Steady State Scenarios
ITR/P1-23	Khimchenko, L.N.	Russian Federation	Progress in High Energy Load Test of Beryllium, Tungsten and CFC for ITER First Wall and Divertor
ITR/P1-24	Roth, J.	Germany	Consequences of Deuterium Retention and Release from Be-containing Mixed Materials for ITER Tritium Inventory Control
ITR/P1-25	Stober, J.	Germany	ECRH assisted plasma start-up with toroidally inclined launch: multi-machine comparison and perspectives for ITER
ITR/P1-26	Wesley, J.C.	USA	Disruption, Halo Current and Rapid Shutdown Database Activities for ITER
ITR/P1-27	Baylor, L.R.	USA	Shattered Pellet Disruption Mitigation Technology Development for ITER
ITR/P1-28	Maruyama, S.	ITER	ITER Fuelling System Design and Challenges — Gas and Pellet Injection and Disruption Mitigation
ITR/P1-29	Budny, R.V.	USA	Benchmarking ICRF simulations for ITER
ITR/P1-30	Fenstermacher, M.E.	USA	ELM Control by Resonant Magnetic Perturbations: Overview of Research by the ITPA Pedestal and Edge Physics Group
ITR/P1-31	Garkusha, I.E.	Ukraine	Experimental Simulation of ITER ELMs Impacts to the Tungsten Surfaces with QSPA Kh-50
ITR/P1-32	Konovalov, S.V.	Russian Federation	Characterization of Runaway Electrons in ITER
ITR/P1-33	Kukushkin, A.S.	Russian Federation	ITER Divertor Performance in the Low Activation Phase
ITR/P1-34	Minashin, P.V.	Russian Federation	Electron Cyclotron Power Losses in ITER for 2D Profile of Magnetic Field
ITR/P1-35	Murakami, M.	USA	Integrated Modeling of Steady-state Scenarios and Heating and Current Drive Mixes for ITER
ITR/P1-36	Shinohara, K.	Japan	3D Effect of Ferromagnetic Materials on Alpha Particle Power Loads on First Wall Structures and Equilibrium on ITER
ITR/P1-37	Boeuf, J.P.	France	Physics and Modeling of the Negative Ion Source for the ITER Neutral Beam Injection
ITR/P1-38	Bayon, A.	European Commission	Results of the Prototype EB-Welded Segment for the ITER Vacuum Vessel
ITR/P1-39	Chang, M.H.	Republic of Korea	Unit Operation Analysis of the Tritium Plant Storage and Delivery System in ITER
ITR/P1-40	Choi, J.C.	Republic of Korea	Study on the Impact of Plasma Disruption on the Current Control of the ITER Coil Power Supply
ITR/P1-41	Chung, W.	Republic of Korea	Status of design and R&D activities for ITER thermal shield
ITR/P1-42	Kim, B.C.	Republic of Korea	Fabrication Design Progress of ITER Vacuum Vessel in Korea

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
ITR/P1-43	Kim, D.-H.	Republic of Korea	Current Activities on Design and Development of ITER Blanket Shield Block
ITR/P1-44	Kim, K.B.Y.	Republic of Korea	Status on the Development of the Fabrication Technology and the Mock-up Qualification Tests for the ITER Blanket First Wall
ITR/P1-45	Li , P.Y.	China	R & D of the Fabrication Technology for ITER Magnet Supports
ITR/P1-46	Liu, X.	China	Characterization of Chinese Beryllium as the Candidate Armour Material for ITER First Wall
ITR/P1-47	Nam, K.	Republic of Korea	Status of Design and R&D for ITER Sector Sub-assembly Tools
ITR/P1-48	Oh, J.S.	Republic of Korea	Status of the Korean R&D Program on the ITER Coil Power Converters
ITR/P1-50	Takahashi, Y.T.	Japan	Technology Development for the Manufacture of Nb3Sn conductors for ITER Toroidal Field coils
ITR/P1-51	Weber, H.W.	Austria	Radiation resistant insulation systems for the ITER toroidal field coils
ITR/P1-52	Wei, J.W.	China	R&D of the ITER Correction Coil magnet system
ITR/P1-53	Wikman, H.S.V.	European Commission	Recent Development and Qualification of Materials for ITER
ITR/P1-54	Zacchia, F.Z.	European Commission	Fabrication and testing of the EU FW qualification mock-up
ITR/P1-55	Zhou, T.Z.	China	R&D on 52kA HTS Trial Current Lead for ITER
FTP/P1-01	Ahn, M.Y.A.	Republic of Korea	Thermal Diffusivity Measurement of Graphite Pebble Bed by Laser Flash Method
FTP/P1-02	Chikada, T.	Japan	Surface Behavior in Deuterium Permeation through Erbium Oxide Coating
FTP/P1-03	Chung, H.S.	Republic of Korea	Manufacturing and Heat Transfer Tests of a Rectangular Tray-Type Tritium Getter Bed
FTP/P1-04	Day, C.	Germany	Considerations towards the fuel cycle of a steady-state DT fusion device
FTP/P1-05	Fukumoto, N.	Japan	Development of a neutral particle flow fueling system by using a compact torus plasma injector for LHD
FTP/P1-06	Qian, X.J.	China	Gas chromatography separation of H2-D2-Ar using Pd/K
FTP/P1-07	Yun, Y.S.H.	Republic of Korea	Variation of PCT Isotherm in the Disproportionated ZrCo
FTP/P1-08	Zalavutdinov, R.Kh.	Russian Federation	A–C:H Film Removal from and Oxidation of W and Mo in H2/Air Glow and Afterglow Discharge
FTP/P1-09	Huang, Z.Y.	China	Measurement of deuterium diffusion and permeation in several stainless steels
FTP/P1-10	Anikeev, A.V.	Germany	A Fusion Neutron Source for the Incineration of Radioactive Waste Based on the Gas Dynamic Trap
FTP/P1-11	Kotschenreuther, M.	USA	Nearer Term Fission-Fusion Hybrids: Recent Results

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
FTP/P1-12	Sahin, S.	Turkey	Fissile Fuel Breeding and Actinide Transmutation in an Inertial Fusion Energy Reactor
FTP/P1-13	Wu, Y.C.	China	A Fusion-Fission Reactor Concept Based on Viable Technologies
FTP/P1-14	Zhou, Z.W.	China	Study on Fission Blanket Fuel Cycling of a Fusion-Fission Hybrid Energy Generation System
FTP/P1-15	Armstrong, D.E.J.	United Kingdom	Micro-Mechanical Testing and Nanoindentation of Tungsten alloys for Fusion Applications
FTP/P1-16	Baluc, N.	Switzerland	From Materials Development to their Test in IFMIF: an Overview
FTP/P1-17	Barnes, C. W.	USA	Radiation Damage from Atomic to Meso-Scales in Extreme Environments
FTP/P1-18	Hishinuma, Y.	Japan	Development of low activation superconducting material for the feedback coil operated around core D-T plasma
FTP/P1-19	Kondo, H.	Japan	Engineering Design and Construction of IFMIF/EVEDA Lithium Test Loop
FTP/P1-20	Kondo, M.	Japan	Flow Assisted Corrosion and Erosion-Corrosion of RAFM Steel in Liquid Breeders
FTP/P1-21	Nagura, M.	Japan	Corrosion Control of Er2O3 in Li as Insulating Material for Liquid Li Blanket System
FTP/P1-22	Nishimura, A.	Japan	14 MeV Neutron Irradiation Effect on Superconducting Properties of Nb3Sn Strand for Fusion Magnet
FTP/P1-23	Wakai, E.	Japan	Status of Japanese Design and Validation Activities of Test Facilities in IFMIF/EVEDA
FTP/P1-24	Wang, P.H.	China	Research and Development of Reduced Activation Ferritic/Martensitic Steel CLF-1 in SWIP
FTP/P1-25	Delaporte, Ph.	France	Why Using Laser for Dust Removal from Tokamaks
FTP/P1-26	Douai, D.D.	France	Recent Results on ICRF Assisted Wall Conditioning in Mid and Large Size Tokamaks
FTP/P1-27	Krasheninnikov, S.I.	USA	On First Wall and Dust Issues in Fusion Devices
FTP/P1-28	Missirlian, M.	France	Consequences of Fatigue on Heat Flux Removal Capabilities of W Actively Cooled Plasma Facing Components
FTP/P1-29	Sakurai, S.	Japan	Design and Development of Lower Divertor for JT-60SA
FTP/P1-30	Song, Y.T.	China	Fully actively-cooled in-vessel components of EAST tokamak
FTP/P1-31	Wong, C.P.C.	USA	Plasma Facing Material Selection: A Critical Issue for Magnetic Fusion Power Development
FTP/P1-32	Hong, S.H.	Republic of Korea	On the Spherical Dusts in Fusion Devices
FTP/P1-33	Nakashima, Y.	Japan	Generation and Characterization of High Heat-Flux Plasma-Flow for Divertor Simulation Studies Using a Large Tandem Mirror Device
FTP/P1-34	Vertkov, A.V.	Russian Federation	Development of Liquid Lithium Limiter for Stellarator TJ-II

Tuesday, 12 October 2010

AFTERNOON SESSIONS

14:00-16:10 **Session OV 4: Overview IV**
Chair: Paméla, J. (France)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
OV/4-1	Azechi, H.	Japan	25	From Fast Ignition Realization Experiments (FIREX) to Electric Power Generation (LIFT)
OV/4-2	Tuccillo, A.A.	Italy	25	Overview of FTU Results
OV/4-3	Callen, J.	USA	25	Effect of 3D Magnetic Perturbations on Toroidal Plasmas
OV/4-4	Sánchez, J.	Spain	25	Overview of TJ-II Experiments
OV/4-5	Yan, L.W.	China	25	Overview of Experimental Results on the HL-2A Tokamak

16:40-18:45 **Session EX/2 & TH/1: ELMs & Pedestal Structure**
Chair: Wade, M. (USA)

THS/1-1	Snyder, P.	USA	20	A First Principles Predictive Model of the Pedestal Height and Width: Development, Testing, and ITER Optimization with the EPED Model
EXC/2-1	Osborne, T.H.	USA	20	Scaling of H-mode Pedestal and ELM Characteristics in the JET and DIII-D Tokamaks
EXC/2-2	Maingi, R.	USA	20	Modification of Edge Profiles, Edge Transport, and ELM Stability with Lithium in NSTX
EXC/2-3Ra	Meyer, H.	United Kingdom	20	L/H transition and pedestal studies on MAST
EXC/2-3Rb	Kaye, S.M.	USA		L-H Threshold Studies in NSTX
EXC/2-4Ra	Gohil, P.	USA	20	L-H Transition Studies on DIII-D to Determine H-mode Access for Non-Nuclear Operational Scenarios in ITER
EXC/2-4Rb	McDonald, D.C.	United Kingdom		JET Helium-4 ELMy H-mode studies
EXC/2-5Ra	Hirsch, M.	Germany	20	H-mode in Helical Devices
EXC/2-5Rb	Bosch, H.S.	Germany		Overview of the construction and scientific objectives of the Wendelstein 7-X stellarator

Tuesday, 12 October 2010

AFTERNOON POSTER SESSIONS

14:00-18:45 Poster Session P2: Scenarios, Core MHD, Disruption control

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXC/P2-01	Ding, S.	China	Performance predictions of RF heated plasma in EAST
EXC/P2-02	Wilson, J.R.	USA	Experiments and Simulations of ITER-like Plasmas in Alcator C-Mod
EXC/P2-03	Leuer, J.A.	USA	Solenoid-Free Startup Experiments in DIII-D
EXC/P2-04	Nagata, M.	Japan	Demonstration of Multipulsed Current Drive Scenario using Coaxial Helicity Injection in the HIST Spherical Torus Plasmas
EXC/P2-05	Park, J.M.	USA	Experiment and Modeling of ITER Demonstration Discharges in the DIII-D Tokamak
EXC/P2-06	Politzer, P.A.	USA	Understanding Confinement in Advanced Inductive Scenario Plasmas — Dependence on Gyroradius and Rotation
EXC/P2-07	Schweinzer, J.	Germany	Confinement of 'Improved H-modes' in the All-Tungsten ASDEX Upgrade
EXC/P2-08	Sips, A.C.C.	European Commission	ITER ramp-up and ramp-down scenarios studies in helium and deuterium plasmas in JET
EXC/P2-09	Yuan, Q.P.	China	Plasma Shape Feedback Control on EAST
EXS/P2-01	Bogatu, I.N.	USA	Disruption Mitigation with Plasma Jets for ITER
EXS/P2-02	Commaux, N.	USA	Novel Rapid Shutdown Strategies for Runaway Electron Suppression in DIII-D
EXS/P2-03	De Angelis, R.	Italy	Determination of Q Profiles in Jet by Consistency of Motional Stark Effect and MHD Mode Localization
EXS/P2-04	De Vries, P.C.	Netherlands	Survey into the occurence of disruptions and their root causes at JET
EXS/P2-05	Eidietis, N.W.	USA	A Diffusive Model for Halo Width Growth During VDEs
EXS/P2-06	Ferron, J.R.	USA	Optimization of the Safety Factor Profile for High Noninductive Current Fraction Discharges in DIII-D
EXS/P2-07	Fonck, R.J.	USA	Nonsolenoidal Startup and Plasma Stability at Near-Unity Aspect Ratio in the Pegasus Toroidal Experiment
EXS/P2-08	Gerhardt, S.P.	USA	Performance of Discharges with High Elongation and Beta in NSTX and Near-Term Paths Toward Steady State
EXS/P2-09	Hahn, S.-H.	Republic of Korea	Approaches on vertical stability and shape control of KSTAR plasmas in the presence of intrinsic ferromagnetic material
EXS/P2-10	Hoang, G.T.	France	Real-time Control of MHD Activity and steady-state current profile by non-inductive current drive in Tore Supra
EXS/P2-11	Jackson, G.L.	USA	DIII-D Experimental Simulation of ITER Scenario Access and Termination

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXS/P2-12	Kim, J.	Republic of Korea	Stable plasma start-up in the KSTAR under various discharge conditions
EXS/P2-13	Lehnen, M.	Germany	Disruption Mitigation by Massive Gas Injection in JET
EXS/P2-14	Lin, S.Y.	China	Suppression of Runaway Electrons during Disruption in HT-7
EXS/P2-15	Pautasso, G.	Germany	Contribution of ASDEX Upgrade to disruption studies for ITER
EXS/P2-16	Saint-Laurent, F.	France	Disruption and Runaways Electron Mitigation Studies on Tore Supra
EXS/P2-17	Sauter, O.	Switzerland	Effects of ECH/ECCD on Tearing Modes in TCV and Link to Rotation Profile
EXS/P2-18	Xiao, D.	China	Optimization of EAST Plasma Start-Up for Simulations of ITER with Low Loop Voltage
EXS/P2-19	Yamada, T.	Japan	Double Null Merging Start-up Experiments in the University of Tokyo Spherical Tokamak
EXS/P2-20	Yang, Q.W.	China	First Observation of Persistent Small Magnetic Islands on HL-2A
EXS/P2-21	Zhang, W.Y.	China	Experimental study of electron scale density fluctuation in LHCD plasma on HT-7 Tokamak
EXS/P2-22	Zushi, H.	Japan	Study of Edge Turbulence from the Open to Closed Magnetic Field Configuration during the Current Ramp-up Phase in QUEST
EXW/P2-01	De Baar, M.R.	Netherlands	Control of MHD modes with a line-of-sight ECE diagnostic
EXW/P2-02	Ejiri, A.	Japan	Non-inductive Plasma Current Start-up Experiments in the TST-2 Spherical Tokamak
EXW/P2-03	Granucci, G.	Italy	Plasma Start-up Results with EC Assisted Breakdown on FTU
EXW/P2-04	Huang, H.H.	China	Power Supply of Vertical Stability coil in EAST
EXW/P2-05	Joung, M.	Republic of Korea	ECH-assisted Startup using Pre-ionization by the second harmonic 84 GHz and 110 GHz EC Waves in KSTAR
EXW/P2-06	McCollam, K.J.	USA	Confinement Measurements and MHD Simulations of Oscillating-Field Current Drive in a Reversed-Field Pinch
EXW/P2-07	Moreau, D.	France	Plasma Models for Real-Time Control of Advanced Tokamak Scenarios
EXW/P2-08	Nelson, B.A.	USA	Demonstration of 200 kA CHI Startup Current Coupling to Transformer Drive on NSTX
EXW/P2-09	Ryu, C.	Republic of Korea	Observation and Analysis of a High Frequency MHD Activity during Sawteeth in KSTAR Tokamak
EXW/P2-10	Tan, Y.	China	Transient Process of A Spherical Tokamak Plasma Startup by Electron Cyclotron Waves
EXW/P2-11	Tereshin, V.I.	Ukraine	RF Plasma Production and Heating Below Ion-Cyclotron Frequencies in Uragan Torsatrons

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXW/P2-12	Uchida, M.	Japan	Generation of Initial Closed Flux Surface by ECH at Conventional Aspect Ratio of R/a ~ 3; Experiments on the LATE device and JT-60U Tokamak
THC/P2-01	Garcia, J.	France	A new steady-state scenario for ITER based on cyclic operation
THC/P2-02	Geiger, J.	Germany	Physics Modeling for Steady-State Experiments at Wendelstein 7-X
THC/P2-03	Guo, Y.	China	TSC simulation and prediction of Ohmic discharge in EAST
THC/P2-04	Kritz, A.H.	USA	Integrated Modeling for Prediction of Optimized ITER Performance
THC/P2-05	Calabrò, G.	Italy	Physics Based Modelling of H-mode and Advanced Tokamak Scenarios for FAST: Analysis of the Role of Rotation in Predicting Core Transport in Future Machines
THD/P2-01	Lukash, V.E.	Russian Federation	Modeling of major disruption mitigation in ITER-like tokamak-reactor by fast injection of massive Li pellets in ITER-like tokamak reactor
THS/P2-02	Ahmad, Z.	Pakistan	Parametric Study of Equilibrium and Stability Analysis of HT-6M Tokamak in the Presence of Flow
THS/P2-03	Breslau, J.A.	USA	Onset and Saturation of a Non-Resonant Internal Mode in NSTX and Implications for AT Modes in ITER
THS/P2-04	Na, Y.-S.	Republic of Korea	Real-time Control of Neoclassical Tearing Mode in Time-dependent Simulations on KSTAR
THS/P2-05	Park, Y.S.	USA	KSTAR Equilibrium Operating Space and Projected Stabilization at High Normalized Beta
THS/P2-06	Strauss, H.R.	USA	Wall forces produced during ITER disruptions
THW/P2-01	Fukuyama, A.	Japan	Kinetic Integrated Modeling of Heating and Current Drive in Tokamak Plasmas
THW/P2-02	Kim, S.H.	France	Full Tokamak Discharge Simulation for ITER
THW/P2-03	Lerche, E.A.L.	Belgium	Potential of the ICRF heating schemes foreseen for ITER's half-field Hydrogen phase
THW/P2-04	Seol, J.	Republic of Korea	Modeling of Nonlinear Electron Cyclotron Heating during ECH-assisted Plasma Startup in a Tokamak

Wednesday, 13 October 2010

MORNING SESSIONS

8:30-10:15 **Session OV/5: Overview V**
Chair: Azizov, E. (Russian Federation)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
OV/5-1	Jacquemot, S.	France	25	Studying Ignition Schemes on European Laser Facilities
OV/5-2	Coda, S.	Switzerland	25	Progress and Scientific Results in the TCV Tokamak
OV/5-3Ra	Martin, P.	Italy	25	Overview of the RFX Fusion Science Program
OV/5-3Rb	Sarff, J.S.	USA		Overview of Results in the MST Reversed Field Pinch Experiment
OV/5-4	Peeters, A.G.	United Kingdom	25	Toroidal Momentum Transport.

10:45-12:30 **Session EX/3 Momentum Transport**
Chair: Prager, S. (USA)

EX/3-1	Tala, T.	Finland	20	JET Rotation Experiments towards the Capability to Predict the Toroidal Rotation Profile
EX/3-2	Yoshida, M.	Japan	20	Core and edge toroidal rotation study in JT-60U
EX/3-3	Rice, J.E.	USA	20	Progress towards a physics based phenomenology of intrinsic rotation in H-mode and I-mode
EX/3-4	Fenzi, C.	France	20	On Plasma Rotation with Toroidal Magnetic Field Ripple and No External Momentum Input
EX/3-5	Solomon, W.M.	USA	20	Characterization of the Effective Torque Profile Associated with Driving Intrinsic Rotation on DIII-D

Wednesday, 13 October 2010

MORNING POSTER SESSIONS

08:30-12:30 Poster Session P3: ELMs & Pedestal Plasma-Wall Interactions

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXC/P3-01	Estrada, T.	Spain	L-H transition experiments in the TJ-II stellarator
EXC/P3-02	Giroud, C.	United Kingdom	Integration of a radiative divertor for heat load control into JET operational scenarios
EXC/P3-03	Kurzan, B.	Germany	Transport in-between edge localized modes in the pedestal of ASDEX Upgrade
EXC/P3-04	Pedrosa, M.A.	Spain	Edge Sheared Flows as a Source of Propagating Plasma Potential Events
EXC/P3-05	Yan, Z.	USA	Pedestal Turbulence Dynamics in ELMing and ELM-Free H-Mode Plasmas
EXC/P3-06	Hughes, J.W.	USA	Power requirements for superior H-mode confinement on Alcator C-Mod: Experiments in support of ITER
EXD/P3-01	Ahn, J.W.	USA	Divertor Profile Modification by the Effect of 3-D Field Perturbation in NSTX
EXD/P3-02	Asakura, N.A.	Japan	Experimental and simulation studies of dust transport in JT-60U tokamak
EXD/P3-03	Balden, M.	Germany	Morphology Classification and Video Tracking of Dust Particles in ASDEX Upgrade
EXD/P3-04	Brezinsek, S.	Germany	Fuel Retention in Discharges with Impurity Seeding after Strong Be Evaporation in JET
EXD/P3-05	Cheng, J.	China	Spatial structures of plasma filaments in the scrape-off layer in HL-2A
EXD/P3-06	Dal Bello, S.	Italy	Lithisation effects on density control and plasma performance in RFX-mod experiment
EXD/P3-07	De Temmerman, G.	Netherlands	ELM-simulation experiments on Pilot-PSI using simultaneous high flux plasma and transient heat/particle source
EXD/P3-08	Doerner, R.P.	USA	Multi-component Plasma Interactions with Elemental and Mixed-material Surfaces
EXD/P3-09	Drapiko, E.A.	Japan	Effect of magnetic island on three-dimensional structure of edge radiation and its consequences for detachment in LHD (EX-D)
EXD/P3-10	Fukumoto, M.	Japan	Deuterium retention mechanism in tungsten-coatings exposed to JT-60U divertor plasmas
EXD/P3-11	Fundamenski, W.R.	United Kingdom	Effect of ion mass and charge on divertor heat load profiles on JET
EXD/P3-12	Gong, X.	China	A New Explore: High Frequency Glow Discharge Cleaning in the Presence of Toroidal Field on EAST
EXD/P3-13	Gray, T.K.	USA	Dependences of the divertor and midplane heat flux widths in NSTX
EXD/P3-14	Guo, H.Y.	China	Recent Advances in Long Pulse Divertor Operations on EAST

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXD/P3-15	Hino, T.	Japan	Investigation of the toroidal and poloidal dependences of first wall conditions in the Large Helical Device
EXD/P3-16	Ivanova, D.M.	Sweden	Dust Particles in Controlled Fusion Devices: Generation Mechanism and Analysis
EXD/P3-17	Kim, W.-C.	Republic of Korea	Initial Phase Wall Conditioning in KSTAR
EXD/P3-18	Kolemen, E.	USA	Plasma Modeling Results, Control Improvement for NSTX* and Applications to ITER
EXD/P3-19	Krieger, K.	Germany	Be migration studies at JET and their interpretation by an integrated model for plasma impurity transport and wall composition dynamics
EXD/P3-20	Lasnier, C.J.	USA	Scaling of Divertor Heat Flux Profile Widths in DIII-D
EXD/P3-21	Linke, J.	Germany	Performance of different tungsten grades under transient thermal loads
EXD/P3-22	Mirnov, S.V.	Russian Federation	Li experiments on T-11M and T-10 in support of steady state tokamak concept with Li closed loop circulation
EXD/P3-23	Müller, H.W.	Germany	Fluctuations, ELM Filaments and Turbulent Transport in the SOL at the Outer Midplane of ASDEX Upgrade
EXD/P3-24	Neu, R.L.	Germany	Power and Particle Exhaust Control in All W ASDEX Upgrade
EXD/P3-25	Oya, Y.	Japan	Impurity effects on hydrogen isotope retention in boronized wall of LHD
EXD/P3-26	Petersson, P.	Sweden	Fuel Inventory in Carbon Fiber Composites from Tokamaks, Detailed Mapping and Quantification
EXD/P3-27	Petrie, T.W.	USA	Results from Radiating Divertor Experiments with RMP ELM Suppression
EXD/P3-28	Rohde, V.	Germany	Dynamic wall loads measured by gas balance technique in all tungsten ASDEX Upgrade
EXD/P3-29	Scarin, P.	Italy	Magnetic structures and pressure profiles in the plasma boundary of RFX-mod: high current and density limit in helical regimes
EXD/P3-30	Schmitz, O.	Germany	Key Results from the DIII-D/TEXTOR Collaboration on the Physics of Stochastic Boundaries projected to ELM Control at ITER
EXD/P3-31	Sontag, A.C.	USA	Pedestal Characterization and Stability of Small-ELM Regimes in NSTX
EXD/P3-32	Soukhanovskii, V. A.	USA	Synergy between the innovative “Snowflake” Divertor Configuration and Lithium Plasma-Facing Component Coatings in NSTX
ICC/P3-01	Majeski, R.	USA	First Results from the Lithium Tokamak eXperiment (LTX)
EXD/P3-33	Tabares, F.L.	Spain	Inhibition of C: H Co-deposit Formation by Ammonia Injection in Remote Areas of ITER
EXD/P3-34	Tamain, P.	France	Towards a comprehensive approach of edge and SOL transport issues: from experimental results to global simulations

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXD/P3-35	Van Rooij, G.J.	Netherlands	Gross and Net Chemical Erosion of Carbon at High Fluxes of Low Temperature Hydrogen Plasma
EXD/P3-36	Watkins, J.G.	USA	Main Chamber Plasma-Wall Interaction Studies in DIII-D in Support of ITER
EXD/P3-37	Wukitch, S.J.	USA	ICRF Impurity Behavior with Boron Coated Molybdenum Tiles in Alcator C-Mod
EXS/P3-01	Frassinetti, L.	Sweden	Controlled Resonant Magnetic Perturbation Physics Studies on EXTRAP T2R
EXS/P3-02	Huang, Y.	China	Study of Edge Localized Mode in HL-2A Tokamak Experiments
EXS/P3-03	Lang, P.T.	Germany	ELM pacing investigations at JET with the new pellet launcher
EXS/P3-04	Liang, Y.	Germany	Multi-Resonance Effect in Type-I ELM Control with Low n Fields on JET
EXS/P3-05	Solano, E.R.	Spain	Observation of Confined Current Structures in JET High Temperature Pedestals and Transient ELM Suppression
EXS/P3-06	Sun, Y.	Germany	Non-resonant magnetic braking on JET and TEXTOR
THC/P3-01	Aydemir, A.Y.	USA	On the role of magnetic geometry and flows on the L-H transition power threshold
THC/P3-02	Cary, J.H.	USA	Coupled Core-Edge Simulations of Pedestal Formation Using the FACETS Framework
THC/P3-03	Kim, K.M.	Republic of Korea	Effects of Pellet ELM Pacing on Mitigation of Type-I ELM Energy Loss in KSTAR and ITER
THC/P3-04	Lee, K.C.	USA	H-mode transition Analysis of NSTX based on the Er formation mechanism by the gyrocenter shift
THC/P3-05	Pankin, A.Y.	USA	Kinetic-based Modeling of H-mode Pedestal with Theory-based Anomalous Transport Models and MHD Stability Criterion
THC/P3-06	Rozhansky, V.	Russian Federation	Modeling of the Edge Plasma of MAST in the Presence of Resonant Magnetic Perturbations
THD/P3-01	Joseph, I.	USA	Driving Toroidally Asymmetric Current Through the Tokamak Scrape-Off Layer to Control Edge-Localized Instabilities and Equilibrium Profiles
THD/P3-02	Marandet, Y.	France	Transport of neutrals in turbulent SOL plasmas
THD/P3-03	Naulin, V.	Denmark	Progress in Turbulence Modeling JET SOL and edge phenomena
THD/P3-04	Ohya, K.	Japan	Molecular Dynamics Study of Plasma Surface Interaction of Codeposited Materials
THD/P3-05	Rognlien, T.D.	USA	Advances in Understanding Tokamaks Edge/Scrape-Off Layer Transport

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
THD/P3-07	Sugita, S.	Japan	Study of Radial Particle Transport Accompanied with Plasma Blob and Self-organized Meso-scale Structure in Tokamak Scrape-off Layer
THD/P3-08	Umansky, M.V.	USA	Validation of turbulent plasma transport simulations for collisional linear plasma
THS/P3-01	Aiba, N.	Japan	Mechanisms of the plasma rotation effect on the type-I ELM in tokamaks
THS/P3-02	Hayashi, N.	Japan	Integrated simulation of ELM triggered by pellet through energy absorption and transport enhancement
THS/P3-04	Sugiyama, L.E.	USA	Magnetic X-points, edge instabilities, and the H-mode edge
THS/P3-05	Xu, X.Q.	USA	Nonlinear ELM simulations based on peeling-ballooning modes using the BOUT/BOUT++ code
THS/P3-06	Yu, Q.	Germany	Plasma Response to Externally Applied Resonant Magnetic Perturbations
THW/P3-01	Kurki-Suonio, T.	Finland	Fast Ion power loads on ITER First Wall Structures in the Presence of NTMs and microturbulence

Wednesday, 13 October 2010

AFTERNOON SESSIONS

14:00-16:10 Session EX/4 & TH/2: Waves and & Energetic Particles
Chair: Guenter, S. (Germany)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
EXW/4-1	Lin, Y.	USA	20	ICRF Mode Conversion Flow Drive on Alcator C-Mod
THW/2-1	Gusakov, E.Z.	Russian Federation	20	Low Threshold Parametric Decay Instabilities in Tokamak ECRH Experiments
THW/2-2Ra	Lauber, Ph.	Germany	20	Damping, Drive and Non-linear Effects of Kinetic Low-frequency Modes in Tokamaks
THW/2-2Rb	Fu, G.Y.	USA		Simulations of Energetic Particle-driven Instabilities with Source and Sink
EXW/4-2	Pace, D.C.	USA	20	Transport of Energetic Ions Due to Microturbulence, Sawteeth, and Alfven Eigenmodes
THW/2-3Ra	Todo, Y.	Japan	20	Simulation Study of Nonlinear Magnetohydrodynamic Effects on Alfvén Eigenmode Evolution and Zonal Flow Generation
EXW/4-3Rb	Ido, T.	Japan		Potential Fluctuation Associated with Energetic-Particle Induced Geodesic Acoustic Mode in Reversed Magnetic Shear Plasmas on LHD
THW/2-4Ra	Wang, X.	China	20	Kinetic Thermal Ions Effects on Alfvenic Fluctuations in Tokamak Plasmas
EXW/4-4Rb	Chen, W.	China		Destabilization of Beta-induced Alfvén Eigenmodes in the HL-2A Tokamak

Wednesday, 13 October 2010

AFTERNOON SESSIONS (continuation)

16:40-18:45 **Session ITR/2 & FTP/1 & SEE/1:**
ITER, Fusion Technology, Safety, Environmental & Economics Aspects of Fusion
Chair: Liu, Y. (China)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
IT/2-1	Sborchia, C.	European Commission	20	The ITER Magnet Systems: Progress on Construction
IT/2-2	Babineau, D.W.B.	ITER	20	Review of the ITER Fuel Cycle
IT/2-3	Merola, M.	ITER	20	Power Handling in ITER: Divertor and Blanket Design and R&D
FTP/1-1Ra	Kojima, A	Japan	20	Demonstration of 500 keV beam acceleration on JT-60 negative-ion-based neutral beam injector
ITR/2-4Rb	Kashiwagi, M.	Japan		1 MV Holding and Beam Optics in a Multi-aperture Multi-grid Accelerator for ITER NBI
FTP/1-2Ra	Litvak, A.G.	Russian Federation	20	Development in Russia of Megawatt Power Gyrotrons for Fusion
ITR/2-5Rb	Sakamoto, K.	Japan		Development of high power gyrotrons and EC technologies for ITER
ITR/2-5Rc	Gantenbein, G.	Germany		2.2 MW Operation of the European Coaxial-Cavity Pre-Prototype Gyrotron for ITER
SEE/1-1Ra	Goldston, R.J.	USA	20	Fusion Energy and Climate Change
SEE/1-1Rb	Muehlich, P.	Germany		The Potential Role for Fusion Power in Future Energy Markets
SEE/1-1Rc	Yamazaki, K.	Japan		Environmental and Economic Assessments of Magnetic and Inertial Confinement Fusion Reactors

Wednesday, 13 October 2010

AFTERNOON POSTER SESSIONS

14:00-18:45 Poster Session P4: Momentum & Turbulent Transport, Transport Barriers

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXC/P4-01	Andreev, V.F.	Russian Federation	ITB formation and MHD activity in experiments with rational surface density control
EXC/P4-02	Brower, D.L.	USA	Fluctuation-Induced Momentum Transport and Plasma Flows in the MST Reversed Field Pinch
EXC/P4-03	Burdakov, A.V.	Russian Federation	New Experiments on the GOL-3 Multiple Mirror Trap
EXC/P4-04	Delgado-Aparicio, L.	USA	Dependence of particle transport on collisionality, rotation and MHD in NSTX
EXC/P4-05	Frigione, D.	Italy	Particle Deposition, Transport and Fuelling in Pellet Injection Experiments at JET
EXC/P4-06	Gao, X.	China	Experimental Study of Plasma Confinement on EAST
EXC/P4-07	Hole, M.J.	Australia	Model/Data Fusion: developing Bayesian inversion to constrain equilibrium and mode structure
EXC/P4-08	Nagaoka, K.	Japan	Heat and Momentum Transport of Ion Internal Transport Barrier Plasmas on Large Helical Device
EXC/P4-09	Neudatchin, S.V.	Russian Federation	ITB Formation During Slow Electron and Ion Heat Pulse Propagation in Tokamaks
EXC/P4-10	Puiatti, M.E.	Italy	Internal and edge electron transport barriers in the RFX-mod Reversed Field Pinch
EXC/P4-11	Shimizu, A.	Japan	Experimental Study of Potential Profile Formation in Large Helical Device
EXC/P4-12	Litaudon, X.L.	France	Core Transport Properties in JT-60U and JET Identity Plasmas
EXC/P4-13	Picha, R.	Thailand	Scaling of Density Peaking for Plasma with Pellet Injection
EXS/P4-01	Duval, B.P.	Switzerland	Momentum Transport In TCV Across Sawteeth Events
EXS/P4-02	Melnikov, A.V.	Russian Federation	Plasma Potential and Turbulence Dynamics in Toroidal Devices (Survey of T-10 and TJ-II Experiments)
THC/P4-01	Barnes, M.	United Kingdom	Shear flow suppression of turbulent transport and self-consistent profile evolution within a multi-scale gyrokinetic framework
THC/P4-02	Bottino, A.	Germany	Global nonlinear gyrokinetic simulations of electromagnetic turbulence in tokamaks and stellarators
THC/P4-03	Cappello, S.	Italy	Equilibrium and Transport for Quasi Helical Reversed Field Pinches
THC/P4-04	Chang, C.S.	USA	Self-consistent simulation of kinetic pedestal transport under RMP penetration
THC/P4-05	Del-Castillo-Negrete, D.	USA	Non-local transport modeling of heat transport in LHD

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
THC/P4-06	Dif-Pradalier, G.	USA	Nonlocal Dynamics of Turbulence, Transport and Zonal Flows in Tokamak Plasmas
THC/P4-07	Dnestrovskij, Y.N.	Russian Federation	Canonical Profiles and Transport Model for Toroidal Rotation in Tokamak
THC/P4-08	Ethier, S.	USA	Global Gyrokinetic Simulation of Electron Temperature Gradient Turbulence and Transport in NSTX Plasmas
THC/P4-09	Fülöp, T.	Sweden	Impurity transport driven by electrostatic turbulence in tokamak plasmas
THC/P4-10	Honda, M.	Japan	Alpha Particle-Driven Toroidal Rotation in Burning Plasmas
THC/P4-11	Horton, W.	USA	Turbulence Impurity Transport Modeling for C-Mod and ITER
THC/P4-12	Hoshino, K.	Japan	Inward Pinch of High-Z Impurity due to Atomic Processes in a Rotating Tokamak Plasma and the Effect of Radial Electric Field
THC/P4-13	Idomura, Y.	Japan	Impact of Toroidal Rotation on Ion Turbulent Transport in Tokamaks
THC/P4-14	Jolliet, S.	Japan	Plasma Size Scaling of Avalanche-like Heat Transport in Tokamaks
THC/P4-15	Kasuya, N.	Japan	Development of Turbulence Diagnostics on Three-Dimensional Fields Obtained by Numerical Simulations in Magnetically Confined Plasmas
THC/P4-16	Li, J.Q.	Japan	Nonlinear Interaction Mechanisms of Multi-scale Multi-mode MHD and Micro-turbulence in Magnetic Fusion Plasmas
THC/P4-17	Lin, Z.	USA	Size Scaling and Nondiffusive Features of Electron Heat Transport in Multi-Scale Turbulence
THC/P4-18	McDevitt, C.J.	USA	Developments in the Theory of Tokamak Flow Self-Organization
THC/P4-19	Miyato, N.	Japan	Effects of strong E x B flow on gyrokinetics
THC/P4-20	Nunami, M.	Japan	Effects of Three-Dimensional Geometry and Collisions on Zonal Flows and Ion Temperature Gradient Modes in Helical Systems
THC/P4-21	Parra, F.I.	United Kingdom	Sources of intrinsic rotation in the low flow ordering
THC/P4-22	Pastukhov, V.P.	Russian Federation	Nonlocal Response of Turbulent Plasma Transport in Tokamak Core on Fast Changes of Power Input
THC/P4-23	Poolyarat, N.	Thailand	Core-edge Simulations of H-mode Tokamak Plasmas using BALDUR and TASK Codes
THC/P4-24	Scott, B.D.	Germany	Gyrokinetic Studies of Turbulence, Equilibrium, and Flows in the Tokamak Edge
THC/P4-25	Singh, R.	India	Intrinsic Toroidal and Poloidal Flow Generation in the Background of ITG Turbulence
THC/P4-26	Tangri, V.	USA	Gyrokinetic Simulation of Temperature Gradient Instability in the RFP
THC/P4-27	Terry, P.W.	USA	Saturation of Plasma Microturbulence by Damped Eigenmodes

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
THC/P4-28	Toda, S.	Japan	Theoretical Transport Analysis of Density limit with Radial Electric Field in Helical Plasmas
THC/P4-29	Wakasa, A.	Japan	Integrated Transport Simulation of LHD Plasmas using TASK3D
THC/P4-30	Wang, W.X.	USA	Characteristics of Turbulence Driven Multiple-Channel Transport in Tokamaks, and Comparison with Experiments
THC/P4-31	Zhang, W.L.	China	Gyrokinetic Simulations of Energetic Particle Turbulence and Transport
THD/P4-01	Yarim, C.	Turkey	Neoclassical Approach to Angular Momentum Transport and Toroidal Rotation in Tokamak Plasmas
THS/P4-01	Futatani, S.	France	Reversal of impurity pinch velocity in tokamak plasma with a reversed magnetic shear configuration
THS/P4-02	Pustovitov, V.D.	Russian Federation	Integral torque balance in the problem of the plasma toroidal rotation
THW/P4-01	Bass, E.M.	USA	Gyrokinetic Simulations of Energetic Particle Driven TAE/EPM Transport Embedded in ITG/TEM Turbulence
THW/P4-02	Gao, Z.	China	Flow Generation Associated with RF Current Drive in a Tokamak Plasma
THW/P4-03	Murakami, S.	Japan	Simulation Study of Toroidal Flow Generation by the ICRF Minority Heating

Thursday, 14 October 2010

MORNING SESSIONS

8:30-10:15 **Session IFE/1: Inertial Fusion Energy**
Chair: Matzen, M. K. (USA)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
IFE/1-1	Meyerhofer, D.D.	USA	20	High-performance ICF target implosions on OMEGA
IFE/1-2	Shiraga, H.	Japan	20	Integrated experiments of Fast Ignition with Gekko-XII and LFEX lasers
IFE/1-3	Moses, E.I.	USA	20	The Path to Inertial Fusion Energy
IFE/1-4	Barty, C.P.J.	USA	20	Lasers for Inertial Fusion Energy
IFE/1-5	Perlado, J.M.	Spain	20	Chamber Dynamics and Radiological Protection in HiPER IFE Project under Repetitive Operation

10:45-12:30 **Session TH/3: Turbulent Transport - Theory & Simulation**
Chair: Cowley, S. (United Kingdom)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
THC/3-1	Jenko, F.	Germany	20	Towards Multiscale Gyrokinetic Simulations of ITER-like Plasmas
THC/3-2	Catto, P.J.	USA	20	Radial electric field evaluation and effects in the core and pedestal
THC/3-3	Kinsey, J.E.	USA	20	ITER Predictions Using the GYRO Verified and Experimentally Validated TGLF Transport Model
THC/3-4Ra	Kim, S.S.	Republic of Korea	20	Hysteresis and Back Transitions in Internal and Edge Transport Barriers
THC/3-4Rb	Kwon, J.M.	Republic of Korea		Gyrokinetic and Gyrofluid Simulation Studies of Non-Diffusive Momentum Transport and Intrinsic Rotation
THC/3-5	Sarazin, Y.	France	20	Predictions on Heat Transport and Plasma Rotation from Global Gyrokinetic Simulations

Thursday, 14 October 2010

MORNING POSTER SESSIONS

08:30-12:30 Poster Session P5: 3D Equilibrium, Stability

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXC/P5-01	Chapman, B.E.	USA	Helical structures and improved confinement in the MST RFP
EXC/P5-02	Hudson, B.	USA	Transport and MHD Analysis of ELM Suppression in DIII-D Hybrid Plasmas Using n=3 Resonant Magnetic Perturbations
EXC/P5-03	Khorshid, P.	Iran, Islamic Rep. of	Edge plasma behavior during externally applied electrode biasing and resonant magnetic perturbation in IR-T1 tokamak
EXS/P5-01	Bolzonella, T.	Italy	Advanced Control of MHD Instabilities in RFX-mod
EXS/P5-02	Buratti, P.	Italy	Kink Instabilities in High-Beta JET Advanced Scenarios
EXS/P5-03	Buttery, R.J.	USA	The Impact of 3D Fields on Tearing Mode Stability of H-modes
EXS/P5-04	Chapman, I.T.	United Kingdom	Macroscopic stability of high beta MAST plasmas
EXS/P5-05	Forest, C.B.	USA	Observation of a resistive wall and ferritic wall modes in a line-tied, screw pinch experiment
EXS/P5-06	Gryaznevich, M.P.	United Kingdom	Determination of plasma stability using Resonant Field Amplification in JET
EXS/P5-07	In, Y.	USA	Error Field Correction in Unstable Resistive Wall Mode (RWM) Regime
EXS/P5-08	Jeon, Y.M.	Republic of Korea	Equilibrium Reconstruction of KSTAR Plasmas with Large Uncertainty on Magnetics
EXS/P5-09	Maget, P.M.	France	Non linear MHD Modelling of NTMs in JET Advanced Scenarios
EXS/P5-10	Marrelli, L.	Italy	Three-dimensional physics studies in RFX-mod
EXS/P5-11	Masamune, S.	Japan	Mode structure of global MHD instabilities and its effect on plasma confinement in LHD
EXS/P5-12	Park, J.-K.	USA	Robust correction of 3D error fields in tokamaks including ITER
EXS/P5-13	Sakakibara, S.	Japan	Exploration of optimal high-beta operation regime by magnetic axis swing in the Large Helical Device
EXS/P5-14	Sanpei, A.	Japan	Characteristics of extremely deep reversal and Quasi-Single-Helicity (QSH) states in a low-aspect-ratio RFP
EXS/P5-15	Xiao, C.	Canada	Control of MHD Instabilities in the STOR-M Tokamak Using Resonant Helical Coils
THC/P5-01	Castejón, F.	Spain	Distributed and Asynchronous Bees Algorithm Applied to Plasma Confinement
THC/P5-03	Ito, A.	Japan	Equilibrium and Stability of High-beta Toroidal Plasmas with Toroidal and Poloidal Flow in Reduced Magnetohydrodynamic Models

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
THC/P5-04	Reiman, A.H.	USA	Three-Dimensional Equilibria with Stochastic Regions Supporting Finite Pressure Gradients
THS/P5-01	Benkadda, S.	France	Progress in understanding the multiscale analysis of Magnetic Island interacting with Turbulence in Tokamak
THS/P5-02	Beyer, P.	France	Impact of the geometry of resonant magnetic perturbations on the dynamics of transport barrier relaxations at the tokamak edge
THS/P5-03	Cai, H.S.	China	Tearing modes in electron magnetohydrodynamics
THS/P5-04	Chu, M.S.	USA	Response of a Resistive and Rotating Tokamak to External Magnetic Perturbations Below the Alfvénic Frequency
THS/P5-05	Furukawa, M.	Japan	A Numerical Matching Technique for Resistive MHD Stability Analysis
THS/P5-06	Halpern, F.D.	France	Non linear, Two Fluid Magnetohydrodynamic Simulations of Internal Kink Mode in Tokamaks
THS/P5-07	Hao, G.Z.	China	Effects of Turbulence Induced Viscosity and Plasma Flow on Resistive Wall Mode Stability
THS/P5-08	Ichiguchi, K.	Japan	Multi-Scale MHD Analysis Incorporating Pressure Transport Equation for Beta-Increasing LHD Plasma
THS/P5-09	Janvier, M.	Japan	A Mechanism of Structure Driven Nonlinear Instability of Double Tearing Mode in Reversed Magnetic Shear Plasmas
THS/P5-10	Liu, Y.Q.	United Kingdom	Modelling of Plasma Response to RMP Fields in MAST and ITER
THS/P5-11	Mirnov, V.V.	USA	Effects of Toroidal Geometry and FLR Nonlocality of Fast Ions on Tearing Modes in Reversed Field Pinch
THS/P5-12	Miura, H.	Japan	Sub-grid scale Effects on Short-wave Instability in Magnetized Hall MHD Plasma
THS/P5-13	Shaing, K.C.	USA	Theory for Neoclassical Toroidal Plasma Viscosity in Tokamaks
THS/P5-14	Shiraishi, J.	Japan	Analytic Theory of a Matching Problem Generalized for Stability Analysis of Resistive Wall Modes in Rotating Plasmas
ICC/P5-01	Asai, T.	Japan	Active Stability Control of a High-Beta Self-Organized Compact Torus
ICC/P5-02	Belova, E.V.	USA	Two-Fluid Mechanism of Plasma Rotation in Field-Reversed Configuration
ICC/P5-03	Jarboe, T.R.	USA	Recent results from the HIT-SI experiment
ICC/P5-04	Oishi, T.	Japan	Helical-Tokamak Hybridization Concepts for Compact Configuration Exploration and MHD Stabilization
ICC/P5-05	Ryzhkov, S.V.	Russian Federation	Modeling of High Density and Strong Magnetic Field Generation by Plasma Jet Compression
ICC/P5-06	Stork, D.	United Kingdom	The upgrade to the Mega Amp Spherical Tokamak

Thursday, 14 October 2010

AFTERNOON SESSIONS

14:00-16:10 Session TH/4 & EX/5: 3D Equilibrium & High-beta Physics
Chair: Galvao, R. (Brazil)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
EX/5-1	Yoon, S.W.	Republic of Korea	20	Effect of Magnetic Materials on In-Vessel Magnetic Configuration in KSTAR
EX/5-2	Ida, K.	Japan	20	Evidence of Stochastic Region near a Rational Surface in Core Plasmas of LHD
THS/4-1	Hegna, C.C.	USA	20	High-beta physics of magnetic islands in 3-D equilibria
EXS/5-3	Matsunaga, G.	Japan	20	Interactions between MHD instabilities in the wall-stabilized high-beta plasmas
EXS/5-4	Reimerdes, H.	USA	20	Non-ideal Modifications of 3D Equilibrium and Resistive Wall Mode Stability Models in DIII-D
EXS/5-5	Sabbagh, S.A.	USA	20	Resistive Wall Mode Stabilization and Plasma Rotation Damping Considerations for Maintaining High Beta Plasma Discharges in NSTX

16:40-18:45 Session EX/6 & TH/5: Plasma-Wall Interactions
Chair: Mirnov, S. (Russian Federation)

EXD/6-1	Coenen, J.W.	Germany	20	Analysis of Tungsten Melt Layer Motion and Splashing under Tokamak conditions at TEXTOR
EXD/6-2	Dux, R.	Germany	20	Erosion and Confinement of Tungsten in ASDEX Upgrade
EXD/6-3	Mazzitelli, G.	Italy	20	FTU results with the liquid lithium limiter
EXD/6-4	Allen, S.L.	USA	20	Particle Control and Transport Experiments in the DIII-D Tokamak with Graphite Walls
EXD/6-5Ra	Kobayashi, M.	Japan	20	Edge Impurity Transport Study in Stochastic Layer of LHD and Scrape-off Layer of HL-2A
THD/5-1Rb	Feng, Y.	Germany		Comparison between Stellarator and Tokamak Divertor Transport
THD/5-2Ra	Shimizu, K.	Japan	20	Self-consistent Integrated Modelling of Core and SOL/divertor Transport and Simulation Study on Transient Heat Load on Divertor Targets
EXD/6-6Rb	Thomsen, H.	Germany		Power load characterization for Type-I ELMy H-Modes in JET

Thursday, 14 October 2010

AFTERNOON POSTER SESSIONS

14:00-18:45 Poster Session P6: IFE, FTP/2

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
FTP/P6-01	Azizov, E.	Russian Federation	Status of Project of Engineering-Physical Tokamak (EPT)
FTP/P6-02	Goto, T.	Japan	Importance of Helical Pitch Parameter in LHD-type Heliotron Reactor Designs
FTP/P6-03	Hwang, Y.S.	Republic of Korea	Conceptual Design Study of Superconducting Spherical Tokamak Reactor with a Self-consistent System Analysis Code
FTP/P6-04	Kamada, Y.	Japan	Research Regimes and Design Optimization of JT-60SA Device towards ITER and DEMO
FTP/P6-05	Na, H.K.	Republic of Korea	Current Status and Facility Operation for KSTAR
FTP/P6-06	Neilson, G.H.	USA	Progress Toward Attractive Stellarators
FTP/P6-07	Simonen, T.C.	USA	A DT Neutron Source for Fusion Materials Development
FTP/P6-08	Tazhibayeva, I.	Kazakhstan	Tokamak KTM Progress Activity for Preparation on First Plasma Start-up
FTP/P6-09	Yang, H.L.	Republic of Korea	Status and Result of the KSTAR Upgrade for the 2010's Campaign
FTP/P6-10	Kuteev, B.V.	Russian Federation	Key Physics Issues of a Compact Tokamak Fusion Neutron Source
FTP/P6-11	Giruzzi, G.	France	Objectives, physics requirements and conceptual design of an ECRH system for JET
FTP/P6-12	Imai, T.	Japan	Development of Over-1 MW Gyrotrons for the LHD and the GAMMA 10 ECH Systems
FTP/P6-13	Kobayashi, T.	Japan	Progress of high power and long pulse ECRF system development in JT-60
FTP/P6-14	Shiraiwa, S.	USA	Design and commissioning of a novel LHCD launcher on Alcator C-Mod
FTP/P6-15	Takase, Y.	Japan	Development of a Plasma Current Ramp-up Technique for Spherical Tokamaks by the Lower-Hybrid Wave
FTP/P6-16	Bae, Y.S.	Republic of Korea	Commissioning Results of the KSTAR NBI System
FTP/P6-17	Hiwatari, R.	Japan	Plasma commissioning scenario and initial tritium inventory for Demo-CREST
FTP/P6-18	Konishi, S.	Japan	Fusion-Biomass Hybrid Concept and its Implication in Fusion Development
FTP/P6-19	Mitarai, O.	Japan	The high density ignition in FFHR helical reactor by neutral beam injection (NBI) heating
FTP/P6-20	Tobita, K.	Japan	Concept of power core components of the SlimCS fusion DEMO reactor

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
FTP/P6-21	Yanagi, N.	Japan	Heat Flux Reduction by Helical Divertor Coils in the Heliotron Fusion Energy Reactor
FTP/P6-22	Ariola, M.	Italy	The New JET Vertical Stabilization System with the Enhanced Radial Field Amplifier and its Relevance for ITER
FTP/P6-23	Cho, S.C.	Republic of Korea	Feasibility of Graphite Reflector in Tritium Breeding Blanket
FTP/P6-24	Lee, D.W.	Republic of Korea	Progress on the Development of Fabrication Technology for the KO HCML TBM
FTP/P6-25	Fischer, U.	Germany	Progress in R&D Efforts on Neutronics and Nuclear Data for Fusion Technology Applications
FTP/P6-26	Hassanein, A.	USA	Can ITER Devices Survive any Single Event of Various Plasma Instabilities?
FTP/P6-27	Nakanishi, H.	Japan	Data Acquisition System for Steady State Experiments at Multi-Sites
FTP/P6-28	Park, S.H.	Republic of Korea	Thermohydraulic Characteristics of KSTAR Magnet System Using ITER-like Superconductors
FTP/P6-29	Peyrot, M.	European Commission	The JT-60SA Superconducting Magnetic System
FTP/P6-30	Takechi, M.	Japan	Design study of plasma control system on JT-60SA for high beta operation
FTP/P6-31	Tatematsu, Y.	Japan	Development of Collective Thomson Scattering System using the Gyrotrons of sub-Tera Hz Region
FTP/P6-32	Titus, P.H.	USA	Progress in Design and R&D for In-Vessel Coils for ITER, DIII-D, and JET
FTP/P6-33	Xu, Z.Y.	China	Experimental Studies of MHD Flow in a Rectangular Duct with FCIs
FTP/P6-34	Rubel, M.J.	Sweden	Comprehensive First Mirror Test for ITER at JET with Carbon Walls
FTP/P6-35	Elaragi, G.	Egypt	Detection of X-ray from Micro-Focus Plasma (0.1kJ)
FTP/P6-36	Salvador, M.	Mexico	Mexican Design of a Tokamak Experimental Facility
IFE/P6-01	Johzaki, T.	Japan	Core Heating Scaling for Fast Ignition Experiment FIREX-I
IFE/P6-02	Stephens, R.B.	USA	Hot Electron Generation for Fast Ignition
IFE/P6-03	Hegelich, B.M.H.	USA	Experimental demonstration of key parameters for Ion-Based Fast Ignition
IFE/P6-04	Murakami, M.M.	Japan	Progresses of Impact Ignition
IFE/P6-05	Matzen, M.K.M.	USA	Direct-Drive Concept for Z-Pinch Inertial Fusion
IFE/P6-06	Logan, B.G.	USA	Progress in U.S. Heavy Ion Fusion Research

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
IFE/P6-08	Li, C.K.	USA	Measurements of Spontaneous Electromagnetic Fields, Plasma Flows, and Implosion Dynamics in Indirect-Drive Inertial-Confinement Fusion
IFE/P6-09	Batani, D.	Italy	Proton Radiography and Fast Electron Propagation through Cylindrically Compressed Targets
IFE/P6-10	Desai, T.	India	Control of Instabilities due to some transient processes in laser accelerated target.
IFE/P6-11	Kim, Y.	USA	Measurements of the Deuterium-Tritium Branching Ratio Using ICF Implosions
IFE/P6-12	Nagatomo, H.	Japan	Implosion Physics and Robust Target Design for Fast Ignition Realization Experiment
IFE/P6-13	Perkins, L.J.	USA	Investigation of High Gain, Shock-Ignited Targets on the National Ignition Facility for Near Term Application
IFE/P6-14	Nakao, Y.N.	Japan	Ignition Regime and Burn Dynamics of DT-Seeded D3He Fuel for Fast Ignition Inertial Confinement Fusion
IFE/P6-15	Lei, Y.A.	China	Low density volume ignition assisted by high-Z shell
IFE/P6-16	Hora, H.	Australia	Laser-Plasma Interaction of Petawatt-Picosecond Laser Pulses with very High Contrast Ratio
IFE/P6-17	Kouhi, M.	Iran, Islamic Rep. of	Resonance at hydrogen-boron(11) fusion applied for high density laser driven volume ignition
IFE/P6-18	Kong, H.J.	Republic of Korea	Coherent tiled 4 beam combination by phase controlled stimulated Brillouin scattering phase conjugation mirrors toward the practical laser fusion driver
IFE/P6-19	Kalal, M.	Czech Republic	Self-Navigation of Laser Drivers on Injected IFE Direct Drive Pellets
IFE/P6-20	Ivanovsky, A.V.	Russian Federation	Use of Super-Power Disk Explosive Magnetic Generators to Ignite a Target by Indirect Radiation of Z-Pinch X-Rays
IFE/P6-21	Norimatsu, T.	Japan	Stagnation of Ablated Metal Vapor in Laser Fusion Reactor with Liquid Wall
IFE/P6-22	Juárez, R.	Spain	Overview on Neutronics, Safety and Radiological Protection of HiPER Facilty
IFE/P6-23	Alvarez, J.	Spain	The Role of the Spatial and Temporal Radiation Deposition in Inertial Fusion Chambers
IFE/P6-24	Cuesta-Lopez, S.	Spain	Modeling Advanced Materials for Nuclear Fusion Technology
IFE/P6-25	Gonzalez-Arrabal, R.	Spain	Study of diffusion and retention of light species (H and He) in pure W and W-based materials
IFE/P6-26	Hamza, A.V.	USA	Target Fabrication for the National Ignition Facility and for Inertial Fusion Energy
IFE/P6-27	Homma, H.	Japan	Recent Development of Target Fabrication and Fuel Layering Technique for FIREX project
IFE/P6-28	Khaydarov, R.	Uzbekistan	Effect of neutron irradiation on the characteristics of laser produced plasma

Friday, 15 October 2010

MORNING SESSIONS

8:30-10:15 **Session EX/7 & TH/6: Turbulent Transport – Zonal Flows & GAMs**
Chair: Komori, A. (Japan)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
EX/7-1	Conway, G.D.	Germany	20	Behaviour of mean and oscillating ExB plasma flows and turbulence interactions during confinement mode transitions
EX/7-2	Rhodes, T.L.	USA	20	Multi-scale/Multi-field Turbulence Measurements to Rigorously Test Gyrokinetic Simulation Predictions on the DIII-D Tokamak
EX/7-3	Zhao, K.	China	20	Experimental Study of Zonal Flow, Geodesic Acoustic Mode and Turbulence Regulation in Edge Plasmas of the HL-2A Tokamak
THC/6-1	Watanabe, T.-H.	Japan	20	Isotope Effects on Zonal Flows and Turbulence in Helical Configurations with Equilibrium-Scale Radial Electric Fields
EXC/7-4Ra	Inagaki, S.	Japan	20	Radial Structure of Fluctuation in Electron ITB Plasmas of LHD
THC/6-2Rb	Sasaki, M.	Japan		Dynamics of low frequency zonal flow driven by geodesic acoustic modes

10:45-12:30 **Session EX/8 & TH/7: Pedestal Stability & Control**
Chair: Hwang, Y. (Republic of Korea)

EXC/8-1	Canik, J.M.	USA	20	Optimization of Density and Radiated Power Evolution Control using Magnetic ELM Pace-making in NSTX
EXD/8-2	Kirk, A.	United Kingdom	20	Magnetic perturbation experiments on MAST using internal coils
EXS/8-3	Oyama, N.	Japan	20	Characteristics and control of Type I ELM in JT-60U
EXC/8-4	De la Luna, E.	Spain	20	Effect of ELM mitigation on confinement and divertor heat loads on JET
THS/7-1	Huysmans, G.T.A.	France	20	Non-linear MHD Simulations of Natural and Pellet Triggered ELMs

Friday, 15 October 2010

MORNING POSTER SESSIONS

08:30-12:30 Poster Session P7/PD: Waves, Energetic Particles

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXC/P7-01	Schmitz, L.	USA	Reduced Electron Thermal Transport in Low Collisionality H-mode Plasmas in DIII-D and the Importance of Small-Scale Turbulence
EXS/P7-01	Kiptily, V.G.	United Kingdom	Studies of MHD Effects on Fast Ions: towards Burning Plasma with ITER-like Wall on JET
EXS/P7-02	Nguyen, C.N.	France	Theoretical and experimental analysis of the destabilization of modes by fast particles in Tore-Supra
EXW/P7-01	Anderson, J.K.	USA	Radiofrequency Current Drive Experiments on MST
EXW/P7-02	Cesario, R.	Italy	Lower hybrid current drive at densities required for thermonuclear reactors
EXW/P7-03	Ding, B.J.	China	Recent Experiments of Lower Hybrid Wave-Plasma Coupling and Current Drive in EAST Tokamak
EXW/P7-04	Durodie, F.J.L.	Belgium	Latest Achievements of the JET ICRF Systems in View of ITER
EXW/P7-05	Ekedahl, A.	France	First Experimental Results with the ITER-Relevant Lower Hybrid Current Drive Launcher in Tore Supra
EXW/P7-06	Fredrickson, E.D.	USA	Observation of Global Alfvén Eigenmode Avalanche-like events on the National Spherical Torus Experiment
EXW/P7-07	Garcia-Munoz, M.	Germany	Fast-Ion Transport Induced by Alfven Eigenmodes in ASDEX Upgrade
EXW/P7-08	Gusev, V.K.	Russian Federation	Investigation of Beams and Waves Plasma Interaction in the Globus-M Spherical Tokamak
EXW/P7-09	Isobe, M.	Japan	Characteristics of Anomalous Transport and Losses of Energetic Ions Caused by Alfvénic Modes in LHD Plasmas
EXW/P7-10	Kramer, G.J.	USA	Fast Ion Effects during Test Blanket Module Simulation Experiments in DIII D
EXW/P7-11	Kwak, J.G.	Republic of Korea	First Results from ICRF Heating Experiment in KSTAR
EXW/P7-12	LeBlanc, B.P.	USA	Recent Developments in High-Harmonic Fast Wave Physics in NSTX
EXW/P7-13	Li, X.L.	China	Neutron Flux Measurements in ICRF Plasmas on HT-7 and EAST
EXW/P7-14	Lilley, M.K.	Sweden	Nonlinear evolution of beam driven waves on MAST
EXW/P7-15	Liu, Yi	China	Studies on Neutral Beam Ion Confinement and MHD Induced Fast-Ion Loss on HL-2A Tokamak
EXW/P7-16	Lu, H.W.	China	Investigation of Fast Pitch Angle Scattering of Runaway Electrons in the EAST Tokamak
EXW/P7-17	Eliseev, L.G.	Russian Federation	Alfven Eigenmodes Properties and Dynamics in the TJ-II Stellarator

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXW/P7-18	Meo, F.	Denmark	Comparison of central fast ion distributions between plasmas with on-axis and off-axis NBI current drive on ASDEX Upgrade
EXW/P7-19	Nagasaki, K.	Japan	Experimental Study of Second Harmonic ECCD in Heliotron J
EXW/P7-20	Nielsen, S.K.	Denmark	Dynamics of fast ions during sawtooth oscillations in the TEXTOR tokamak measured by collective Thomson scattering
EXW/P7-21	Noterdaeme, J.-M.	Germany	Advances in ICRF Physics and Technology on ASDEX Upgrade
EXW/P7-22	Osakabe, M.	Japan	Evaluation of Fast-Ion Confinement with Three Dimensional Magnetic Field Configurations on the Large Helical Device
EXW/P7-23	Podesta, M.P.	USA	Non-linear dynamics of toroidicity-induced Alfven eigenmodes on NSTX
EXW/P7-24	Shi, Y.	China	Investigation of runaway electron beam in EAST
EXW/P7-25	Höhnle, H.	Germany	Extension of the ECRH operational space with O2 and X3 heating schemes to control Waccumulation in ASDEX Upgrade
EXW/P7-26	Tardocchi, M.	Italy	Production and Diagnosis of Energetic Particles in FAST
EXW/P7-27	Testa, D.S.	Switzerland	Recent JET Experiments on Alfven Eigenmodes with Intermediate Toroidal Mode Numbers: Measurements and Modelling
EXW/P7-28	Wallace, G.M.	USA	Reduction of lower hybrid current drive efficiency at high density in Alcator C-Mod
EXW/P7-29	Yang, Y.	China	A New 4MW LHCD System for EAST
EXW/P7-30	Zhang, X.J.	China	Physics and Engineering Aspects of the ICRF Heating System on EAST
EXW/P7-31	Idei, H.	Japan	Phased-array Antenna System for Electron Bernstein Wave Heating and Current Drive Experiments in QUEST
EXW/P7-32	Jacquet, P.	United Kingdom	Heat-loads on JET Plasma Facing Components from ICRF and LH Wave Absorption in the Scrape-Off-Layer
THS/P7-01	He, H.D.	China	Second Stable regime of Internal Kink Modes Excited by Barely Passing Energetic Ions in Tokamak Plasmas
THS/P7-02	Hirota, M.	Japan	Lagrangian approach to resonant three-mode interaction in magnetohydrodynamics
THW/P7-01	Bonoli, P.T.	USA	Validation of Simulation Capability for RF Wave Propagation and Absorption in the Ion Cyclotron Range of Frequencies on Alcator C-Mod
THW/P7-02	Breizman, B.N.	USA	Spontaneous Formation and Evolution of Nonlinear Energetic Particle Modes with Time-dependent Frequencies
THW/P7-03	Bustos, A.B.M.	Spain	Simulations of NBI Fast ions in Stellarators
THW/P7-04	Cardinali, A.	Italy	Energetic particle physics in FAST H-mode scenario with combined NNBI and ICRH
THW/P7-05	Chen, L.	USA	Verification of gyrokinetic particle simulation of Alfven eigenmodes excited by external antenna and by fast ions

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
THW/P7-06	Choi, M.	USA	Finite Orbit Width Monte-Carlo Simulation of Ion Cyclotron Resonance Frequency Heating Scenarios in DIII-D, NSTX, KSTAR and ITER
THW/P7-07	Farengo, R.	Argentina	Alpha Particle Heating and Current Drive in FRCs and Spherical Tokamaks
THW/P7-08	Guenter, S.	Germany	The influence of plasma shaping effects on the damping of toroidal Alfven eigenmodes
THW/P7-09	Harvey, R.W.	USA	Comparison of Quasi-linear and Exact Ion Cyclotron Resonant Heating Diffusion, With and Without Finite Width Ion Orbits
THW/P7-11	Lesur, M.	Japan	Estimation of Kinetic Parameters based on Chirping Alfven Eigenmodes
THW/P7-12	Marchenko, V.S.	Ukraine	Low-Frequency Global Alfven Eigenmodes in Hybrids with Perpendicular Neutral Beam Injection
THW/P7-13	Papp, G.	Hungary	Runaway electron drift orbits in magnetostatic perturbed fields
THW/P7-14	Sorokina, E.A.	Russian Federation	Collisionless Evolution of Isotropic Alpha-Particle Distribution in a Tokamak
THW/P7-15	Vdovin, V.	Russian Federation	3D full wave code modeling of ECRF plasma heating in tokamaks and ITER at fundamental and second harmonics
THW/P7-16	Velasco, J.L.	Spain	Electron Bernstein driven and Bootstrap current estimations in the TJ-II stellarator
THW/P7-17	Yavorskij, V.	Austria	Interpretive modelling of neutral particle fluxes generated by NBI ions in JET
ICC/P7-01	Inomoto, M.	Japan	Kinetic Behaviors of Energetic Ions in Oblate Field-Reversed Configuration
ICC/P7-02	Takeno, H.	Japan	Improvement of Cusp Type and Traveling Wave Type Plasma Direct Energy Converters Applicable to Advanced Fusion Reactor

Friday, 15 October 2010

AFTERNOON SESSIONS

14:00-16:10 Session FTP/2 & PD: Fusion Development Devices - Post-deadline Papers
Chair: Gasparotto, M. (EU)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
FTP/2-1	Barabaschi, P.	European Commission	20	Engineering Design Evolution of the JT-60SA Project
FTP/2-2	Menard, J.E.	USA	20	Prospects for pilot plants based on the tokamak, ST, and stellarator
FTP/2-3Ra	Peng, Y.K.M.	USA	20	Fusion Nuclear Science Facility (FNSF) before Upgrade to Component Test Facility (CTF)
FTP/2-3Rb	Chan, V.S.	USA		A Fusion Development Facility on the Critical Path to Fusion Energy
FTP/2-4	Crisanti, F.C.	Italy	20	Scenario development for FAST in the view of ITER and DEMO
PD-1			20	
PD-2			20	

Friday, 15 October 2010

AFTERNOON SESSIONS (continuation)

16:40-18:45 Session FTP/3: Materials & Fuel Cycle

Chair: Tazhibayeva, I. (Kazakhstan)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
FTP/3-1	Garin, P.	France	20	IFMIF: Status of the Validation Activities and of the Engineering Design Activities
FTP/3-2Ra	Yamanishi, T.	Japan	20	Recent Progress in Fusion Technologies under the BA DEMO-R&D in Phase1 in Japan
FTP/3-2Rb	Ochiai, K.	Japan		Tritium Recovery Experiment from Li Ceramic Breeding Material Irradiated with DT Neutrons
FTP/3-3Ra	Rapp, J.	Netherlands	20	Plasma-Facing Materials Research for Fusion Reactors at FOM Rijnhuizen
FTP/3-3Rb	Koidan, V.S.	Russian Federation		Effects of Plasma Interaction with Radiation- Damaged Tungsten
FTP/3-4Ra	Chernov, V.M.	Russian Federation	20	Heat-Resistant Ferritic-Martensitic Steel RUSFER-EK-181 (Fe-12Cr-2W-V-Ta-B) for Fusion Power Reactor
FTP/3-4Rb	Gaganidze, E.	Germany		Low Cycle Fatigue Properties of Reduced Activation Ferritic/Martensitic Steels after High Dose Neutron Irradiation
FTP/3-4Rc	Okubo, N.	Japan		Reduced activation Ferritic/Martensitic steel F82H for in-vessel components
FTP/3-5Ra	Feng, K.	China	20	Progress on Design and R&D of CN Solid Breeder TBM
FTP/3-5Rb	Tanigawa, H.	Japan		Mock-up Fabrication and Component Tests for Water Cooled Ceramic Breeder Test Blanket Module
FTP/3-6Ra	Kugel, H. W.	USA	20	NSTX Lithium Technologies and Their Impact on Boundary Control, Core Plasma Performance, and Operations
FTP/3-6Rb	Lyublinski, I.E.	Russian Federation		Development and experimental study of lithium based plasma facing elements for fusion reactor application

Friday, 15 October 2010

AFTERNOON POSTER SESSIONS

14:00-18:45 Poster Session P8: Turbulence, Zonal Flows & GAMs

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXC/P8-01	Almagri, A.F.	USA	Non-collisional ion heating and magnetic turbulence in the RFP
EXC/P8-02	Bagryansky, P.A.	Russian Federation	Vortex confinement of hot ion plasma with beta=0.6 in axially symmetric magnetic mirror
EXC/P8-03	Ferreira Nunes, I.M.	European Commission	Confinement and Edge studies towards low rho* and nu* at JET
EXC/P8-04	Field, A.R.	United Kingdom	Plasma rotation and transport in MAST spherical tokamak
EXC/P8-05	Funaba, H.	Japan	Local Transport Property of Reactor-Relevant High-Beta Plasmas on LHD
EXC/P8-06	Guirlet, R.	France	Particle Transport in Vanishing Turbulence Conditions in the Tore Supra Plasma Core
EXC/P8-07	Kitajima, S.	Japan	Electrode Biasing Experiment in the Large Helical Device
EXC/P8-08	Labit, B.	Switzerland	Transport and Turbulence with Innovative Plasma Shapes in the TCV Tokamak
EXC/P8-09	Fasoli, A.	Switzerland	Turbulence and Transport in Simple Magnetized Toroidal Plasmas
EXC/P8-10	Lebedev, S.L.	Russian Federation	Ohmic and NBI Heating in the TUMAN-3M with Increased Toroidal Magnetic Field
EXC/P8-11	Mizuuchi, T.	Japan	Fueling Control for Improving Plasma Performance in Heliotron J
EXC/P8-12	Sartori, R.	European Commission	Comparison between dominant NBI and dominant ICRH heated ELMy H-mode discharges in JET
EXC/P8-13	Martin, Y.	Switzerland	Impurity Transport in TCV: Neoclassical and Turbulent Contributions
EXC/P8-14	Shi, Z.B.	China	Observation of Reduced Core Transport Triggered by ECRH Switch-off on the HL-2A Tokamak
EXC/P8-15	Takahashi, H.	Japan	High Te, low collisional plasma confinement characteristics in LHD
EXC/P8-16	Tamura, N.	Japan	Edge-Core Interaction Revealed with Dynamic Transport Experiment in LHD
EXC/P8-17	Urano, H.	Japan	Comparison of pedestal characteristics in JET & JT-60U similarity experiments under variable toroidal field ripple
EXC/P8-18	Valovic, M.	United Kingdom	Energy confinement and pellet fuelling in MAST
EXC/P8-19	Vermare, L.	France	Impact of collisionality on fluctuation characteristics of micro-turbulence
EXC/P8-20	Xiao, W.W.	China	Particle Transport Investigation in HL-2A Using ECRH and SMBI

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Title of Paper*
EXC/P8-21	Yoshikawa, M.	Japan	Fluctuation Suppression during the ECH induced Potential Formation in the Tandem Mirror GAMMA 10
EXC/P8-22	Yu, D.L.	China	Fuelling efficiency and penetration of supersonic molecular beam injection in HL-2A tokamak plasmas
EXC/P8-23	Zurro, B.	Spain	Perturbation propagation in laser blow-off impurity injection in the TJ-II stellarator and its transport results
EXS/P8-01	Kuznetsov, Y.K.	Brazil	Long-range Correlations and Impurity and MHD Effects on Saw-tooth Oscillation in TCABR Tokamak Biasing and Alfvén Heating Experiments
EXS/P8-02	Narushima, Y.	Japan	Experimental Study of Poloidal Flow Effect on Magnetic Island Dynamics in LHD and TJ-II
THC/P8-01	Gott, Y.V.	Russian Federation	Supression of Trapped Particle Transportin Tilt Tokamaks with High Pressure Plasmas
THC/P8-02	Gurcan, O.D.	France	Dynamics of wave-number spectrum of plasma turbulence
THC/P8-03	Hahm, T.S.	USA	Fine Scale Zonal Flow Dynamics and Its Effect on Isotopic Dependence of Confinement
THC/P8-04	Hallatschek, K.	Germany	Control of Turbulent Transport by GAMs
THC/P8-05	Tokunaga, S.	Japan	Equilibrium Flow Shear and Magnetic Shear Effect on Zonal Flow
THS/P8-01	Ilgisonis, V.	Russian Federation	Geodesic Acoustic Modes in Rotating Large Aspect Ratio Tokamak Plasmas
THS/P8-02	Lakhin, V.P.	Russian Federation	Turbulent Generation of Flows and Magnetic Field at the Rational Magnetic Surfaces of a Tokamak
THS/P8-03	Mykhaylenko, V.S.	Ukraine	Integrated Non-modal Linear and Renormalized Nonlinear Approach to the Theory of Drift Turbulence in Plasma Shear Flow
THS/P8-04	Rajkovic, M.	Serbia	Spatiotemporal chaos, stochasticity and transport in toroidal magnetic configurations
THS/P8-05	Zhang, H.S.	China	Effects of Trapped Electrons in Collisionless Damping of Geodesic Acoustic Mode
THW/P8-01	Qiu, Z.	China	Kinetic Theories of Geodesic Acoustic Mode in Toroidal Plasmas
THW/P8-02	Smolyakov, A.I.	Canada	Physics of Geodesic Acoustic Modes
THW/P8-03	Wang, A.K.	China	A simplified momentum conservation analysis on transport reduction induced by zonal flow and turbulent dissipations

Saturday, 16 October 2010

MORNING SESSIONS

08:30-10:15 Session EX/9 & TH/8 & ICC/1: Transport Barriers & Non-Local Transport
Chair: Li, J. (China)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Title of Paper*
EX/9-1	Yoshinuma, M.	Japan	20	Impurity transport of ion ITB plasmas on LHD
EX/9-2	Mantica, P.	Italy	20	A Key to Improved Ion Core Confinement in JET Tokamak: Ion Stiffness Mitigation due to Combined Plasma Rotation and Low Magnetic Shear
THC/8-1	Singh, R.	India	20	Role of Flow Shear Layer and Edge Plasma Turbulence in Density Limit Physics
EXC/9-3	Xu, Y.	Belgium	20	Long-Range Correlations and Edge Transport Bifurcation in Fusion Plasmas
ICC/1-1Ra	Garnier, D.T.	USA	20	Turbulent Particle Pinch in Levitated Superconducting Dipole
EXC/9-4Rb	Saitoh, H.	Japan		High-Beta Plasma Confinement and Inward Particle Diffusion in the Magnetospheric Device RT-1

10:45-12:30 Session EX/10 & TH/9 Core MHD & Disruption
Chair: Escande, D. (France)

EXS/10-1Ra	Park, H.	Republic of Korea	20	Comparative Study of Sawtooth Physics and Alfvén Waves via 2D ECE Imaging on KSTAR, DIII-D and TEXTOR
EXS/10-1Rb	Xu, X.	China		Study of m/n=1/1 and high-order harmonic modes during the sawtooth oscillation via 2-D ECEI in a low beta tokamak plasma
THS/9-1	Graves, J.P.	Switzerland	20	Sawtooth Control Relying on Toroidally Propagating ICRF Waves
EXW/10-2Ra	Esposito, B.	Italy	20	Avoidance of disruptions at high betaN in ASDEX Upgrade with off-axis ECRH
EXW/10-2Rb	Savrukhin, P.V.	Russian Federation		Control of the nonthermal electrons and current collapse at the density limit disruption in T-10 tokamak
EXS/10-3	Hender, T.C.	United Kingdom	20	JET Disruption Studies in Support of ITER
THS/9-2	Izzo, V.	USA	20	Runaway Electron Modeling for Rapid Shutdown Scenarios in DIII-D, Alcator C-Mod, and ITER

Saturday, 16 October 2010

AFTERNOON SESSIONS

14:00-16:10 **Session S/1: Summary**
Chair: Motojima, O. (ITER)

No of Paper IAEA-CN-180	*Name*	*Designating Member State/Organization*	*Time (min)*	*Topics*
S/1-1	Hawryluk, R.	USA	30	EX/C, ICC
S/1-2	Jacquinot, J.	France	30	EX/S, EX/W, EX/D
S/1-3	Garbet, X.	France	30	TH

16:40-18:00 **Session S/2: Summary, CLOSING**
Chair: Porkolab, M. (USA)

S/2-1	Mima, K.	Japan	30	IFE
S/2-2	Takatsu, H.	Japan	30	FTP, ITR, SEE
CLOSING		IAEA	20	

Poster Sessions Overview

Day Date	Sunday 10 October 2010	Monday 11 October 2010	Tuesday 12 October 2010
08:30 - 10:15			**P1** ITER Fusion Technology 1
Coffee Break			
10:45 - 12:30	**IFRC**		**P1**
Lunch			
14:00 - 16:10	**IFRC**	**OV/P** Overview (all)*	**P2** Scenarios Core MHD Disruption Control
Coffee Break			
16:40 - 18:45	**IFRC** **Registration**	**OV/P** Overview (all)*	**P2**
Break			
		Welcome Dinner	

Wednesday 13 October 2010	Thursday 14 October 2010	Friday 15 October 2010	Saturday 16 October 2010
P3 ELMs & Pedestal Plasma-Wall Interactions	**P5** 3D Equilibrium Stability	**P7, PD** Waves Energetic Particles	
Coffee Break			
P3	**P5**	**P7, PD**	
Lunch			
P4 Momentum & Turbulent Transport Transport barriers	**P6** IFE, FTP/2	**P8** Turbulence Zonal Flows GAMs	
Coffee Break			
P4	**P6**	**P8**	
Break			
Excursion	**Banquet**		

*Overview posters must be displayed during the whole week up to Friday

Posters Listing

Monday to Friday: OVP	Tuesday AM P1	Tuesday PM P2	Wednesday AM P3	Wednesday PM P4
OV/1-1	**ITR/1-1**	**EXC/1-1**	**EXC/2-1**	**EXC/3-1**
OV/1-2	**ITR/1-2**	**EXS/1-2**	**EXC/2-3Ra**	**EXC/3-2**
OV/1-3	**ITR/1-3**	**EXC/1-3**	**EXC/2-3Rb**	**EXC/3-3**
OV/1-4	**ITR/1-4**	**EXC/1-4**	**EXC/2-4Ra**	**EXC/3-4**
OV/2-1	**ITR/1-5**	**EXC/1-5**	**EXC/2-4Rb**	**EXC/3-5**
OV/2-2	**ITR/1-6**	EXC/P2-01	**EXC/2-5Ra**	**EXC/9-1**
OV/2-3	ITR/P1-01	EXC/P2-02	**EXC/2-5Rb**	**EXC/9-2**
OV/2-4	ITR/P1-02	EXC/P2-03	**EXC/8-1**	**EXC/9-3**
OV/2-5	ITR/P1-03	EXC/P2-04	**EXS/8-3**	**EXC/9-4Rb**
OV/3-1	ITR/P1-04	EXC/P2-05	**EXC/8-4**	EXC/P4-01
OV/3-2	ITR/P1-05	EXC/P2-06	**EXC/6-3**	EXC/P4-02
OV/3-3	ITR/P1-06	EXC/P2-07	EXC/P3-01	EXC/P4-03
OV/3-4	ITR/P1-07	EXC/P2-08	EXC/P3-02	EXC/P4-04
OV/4-1	ITR/P1-08	EXC/P2-09	EXC/P3-03	EXC/P4-05
OV/4-2	ITR/P1-09	**EXS/10-1Ra**	EXC/P3-04	EXC/P4-06
OV/4-3	ITR/P1-10	**EXS/10-1Rb**	EXC/P3-05	EXC/P4-07
OV/4-4	ITR/P1-11	**EXS/10-2Rb**	EXC/P3-06	EXC/P4-08
OV/4-5	ITR/P1-12	**EXS/10-3**	**EXD/2-2**	EXC/P4-09
OV/5-1	ITR/P1-13	EXS/P2-01	**EXD/6-1**	EXC/P4-10
OV/5-2	ITR/P1-14	EXS/P2-02	**EXD/6-2**	EXC/P4-11
OV/5-3Ra	ITR/P1-15	EXS/P2-03	**EXD/6-4**	EXC/P4-12
OV/5-3Rb	ITR/P1-16	EXS/P2-04	**EXD/6-5Ra**	EXC/P4-13
OV/5-4	ITR/P1-17	EXS/P2-05	**EXD/6-6Rb**	EXS/P4-01
OV/P-1	ITR/P1-18	EXS/P2-06	**EXD/8-2**	EXS/P4-02
OV/P-2	ITR/P1-19	EXS/P2-07	EXD/P3-01	**THC/3-1**
OV/P-4	ITR/P1-20	EXS/P2-08	EXD/P3-02	**THC/3-2**
OV/P-5	ITR/P1-21	EXS/P2-09	EXD/P3-03	**THC/3-3**
OV/P-6	ITR/P1-22	EXS/P2-10	EXD/P3-04	**THC/3-4Ra**
OV/P-7	ITR/P1-23	EXS/P2-11	EXD/P3-05	**THC/3-4Rb**
OV/P-8	ITR/P1-24	EXS/P2-12	EXD/P3-06	**THC/3-5**
	ITR/P1-25	EXS/P2-13	EXD/P3-07	**THC/8-1**
	ITR/P1-26	EXS/P2-14	EXD/P3-08	THC/P4-01
	ITR/P1-27	EXS/P2-15	EXD/P3-09	THC/P4-02
	ITR/P1-28	EXS/P2-16	EXD/P3-10	THC/P4-03
	ITR/P1-29	EXS/P2-17	EXD/P3-11	THC/P4-04
	ITR/P1-30	EXS/P2-18	EXD/P3-12	THC/P4-05
	ITR/P1-31	EXS/P2-19	EXD/P3-13	THC/P4-06
	ITR/P1-32	EXS/P2-20	EXD/P3-14	THC/P4-07
	ITR/P1-33	EXS/P2-21	EXD/P3-15	THC/P4-08
	ITR/P1-34	EXS/P2-22	EXD/P3-16	THC/P4-09
	ITR/P1-35	**EXW/10-2Ra**	EXD/P3-17	THC/P4-10
	ITR/P1-36	EXW/P2-01	EXD/P3-18	THC/P4-11
	ITR/P1-37	EXW/P2-02	EXD/P3-19	THC/P4-12
	ITR/P1-38	EXW/P2-03	EXD/P3-20	THC/P4-13
	ITR/P1-39	EXW/P2-04	EXD/P3-21	THC/P4-14
	ITR/P1-40	EXW/P2-05	EXD/P3-22	THC/P4-15
	ITR/P1-41	EXW/P2-06	EXD/P3-23	THC/P4-16
	ITR/P1-42	EXW/P2-07	EXD/P3-24	THC/P4-17
	ITR/P1-43	EXW/P2-08	EXD/P3-25	THC/P4-18
	ITR/P1-44	EXW/P2-09	EXD/P3-26	THC/P4-19
	ITR/P1-45	EXW/P2-10	EXD/P3-27	THC/P4-20
	ITR/P1-46	EXW/P2-11	EXD/P3-28	THC/P4-21
	ITR/P1-47	EXW/P2-12	EXD/P3-29	THC/P4-22
	ITR/P1-48	THC/P2-01	EXD/P3-30	THC/P4-23
	ITR/P1-49	THC/P2-02	EXD/P3-31	THC/P4-24
	ITR/P1-50	THC/P2-03	EXD/P3-32	THC/P4-25
	ITR/P1-51	THC/P2-04	ICC/P3-01	THC/P4-26
	ITR/P1-52	THC/P2-05	EXD/P3-33	THC/P4-27
	ITR/P1-53	THD/P2-01	EXD/P3-34	THC/P4-28
	ITR/P1-54	**THS/9-1**	EXD/P3-35	THC/P4-29
	ITR/P1-55	**THS/9-2**	EXD/P3-36	THC/P4-30
	FTP/3-1	THS/P2-02	EXD/P3-37	THC/P4-31
	FTP/3-2Rb	THS/P2-03	EXS/P3-01	THD/P4-01
	FTP/3-3Ra	THS/P2-04	EXS/P3-02	THS/P4-01
	FTP/3-3Rb	THS/P2-05	EXS/P3-03	THS/P4-02
	FTP/3-4Ra	THS/P2-06	EXS/P3-04	THW/P4-01
	FTP/3-4Rb	THW/P2-01	EXS/P3-05	THW/P4-02
	FTP/3-6Rb	THW/P2-02	EXS/P3-06	THW/P4-03
	FTP/P1-01	THW/P2-03	THC/P3-01	**ICC/1-1Ra**
	FTP/P1-02	THW/P2-04	THC/P3-02	ICC/P4-01
	FTP/P1-03		THC/P3-03	
	FTP/P1-04		THC/P3-04	
	FTP/P1-05		THC/P3-05	
	FTP/P1-06		THC/P3-06	
	FTP/P1-07		**THD/5-1Rb**	
	FTP/P1-08		**THD/5-2Ra**	
	FTP/P1-09		THD/P3-01	
	FTP/P1-10		THD/P3-02	
	FTP/P1-11		THD/P3-03	
	FTP/P1-12		THD/P3-04	
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	FTP/P1-14		THD/P3-07	
	FTP/P1-15		THD/P3-08	
	FTP/P1-16		**THS/1-1**	
	FTP/P1-17		**THS/7-1**	
	FTP/P1-18		THS/P3-01	
	FTP/P1-19		THS/P3-02	
	FTP/P1-20		THS/P3-04	
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	FTP/P1-22		THS/P3-06	
	FTP/P1-23		THW/P3-01	
	FTP/P1-24			
	FTP/P1-25			
	FTP/P1-26			
	FTP/P1-27			
	FTP/P1-28			
	FTP/P1-29			
	FTP/P1-30			
	FTP/P1-31			
	FTP/P1-32			
	FTP/P1-33			
	FTP/P1-34			

Thursday AM P5	Thursday PM P6	Friday AM P7	Friday PM P8
EXC/P5-01	**ITR/2-1**	EXC/P7-01	**EXC/7-1**
EXC/P5-02	**ITR/2-2**	EXS/P7-01	**EXC/7-2**
EXC/P5-03	**ITR/2-3**	EXS/P7-02	**EXC/7-3**
EXS/5-1	**ITR/2-4Rb**	**EXW/4-1**	**EXC/7-4Ra**
EXS/5-2	**ITR/2-5Rb**	**EXW/4-2**	EXC/P8-01
EXS/5-3	**ITR/2-5Rc**	**EXW/4-3Rb**	EXC/P8-02
EXS/5-4	**FTP/1-1Ra**	**EXW/4-4Rb**	EXC/P8-03
EXS/5-5	**FTP/1-2Ra**	EXW/P7-01	EXC/P8-04
EXS/P5-01	**FTP/2-1**	EXW/P7-02	EXC/P8-05
EXS/P5-02	**FTP/2-2**	EXW/P7-03	EXC/P8-06
EXS/P5-03	**FTP/2-3Ra**	EXW/P7-04	EXC/P8-07
EXS/P5-04	**FTP/2-3Rb**	EXW/P7-05	EXC/P8-08
EXS/P5-05	**FTP/2-4**	EXW/P7-06	EXC/P8-09
EXS/P5-06	**FTP/3-2Ra**	EXW/P7-07	EXC/P8-10
EXS/P5-07	**FTP/3-4Rc**	EXW/P7-08	EXC/P8-11
EXS/P5-08	**FTP/3-5Ra**	EXW/P7-09	EXC/P8-12
EXS/P5-09	**FTP/3-5Rb**	EXW/P7-10	EXC/P8-13
EXS/P5-10	**FTP/3-6Ra**	EXW/P7-11	EXC/P8-14
EXS/P5-11	FTP/P6-01	EXW/P7-12	EXC/P8-15
EXS/P5-12	FTP/P6-02	EXW/P7-13	EXC/P8-16
EXS/P5-13	FTP/P6-03	EXW/P7-14	EXC/P8-17
EXS/P5-14	FTP/P6-04	EXW/P7-15	EXC/P8-18
EXS/P5-15	FTP/P6-05	EXW/P7-16	EXC/P8-19
THC/P5-01	FTP/P6-06	EXW/P7-17	EXC/P8-20
THC/P5-02	FTP/P6-07	EXW/P7-18	EXC/P8-21
THC/P5-03	FTP/P6-08	EXW/P7-19	EXC/P8-22
THC/P5-04	FTP/P6-09	EXW/P7-20	EXC/P8-23
THS/4-1	FTP/P6-10	EXW/P7-21	EXS/P8-01
THS/P5-01	FTP/P6-11	EXW/P7-22	EXS/P8-02
THS/P5-02	FTP/P6-12	EXW/P7-23	**THC/6-1**
THS/P5-03	FTP/P6-13	EXW/P7-24	**THC/6-2Rb**
THS/P5-04	FTP/P6-14	EXW/P7-25	THC/P8-01
THS/P5-05	FTP/P6-15	EXW/P7-26	THC/P8-02
THS/P5-06	FTP/P6-16	EXW/P7-27	THC/P8-03
THS/P5-07	FTP/P6-17	EXW/P7-28	THC/P8-04
THS/P5-08	FTP/P6-18	EXW/P7-29	THC/P8-05
THS/P5-09	FTP/P6-19	EXW/P7-30	THS/P8-01
THS/P5-10	FTP/P6-20	EXW/P7-31	THS/P8-02
THS/P5-11	FTP/P6-21	EXW/P7-32	THS/P8-03
THS/P5-12	FTP/P6-22	THS/P7-01	THS/P8-04
THS/P5-13	FTP/P6-23	THS/P7-02	THS/P8-05
THS/P5-14	FTP/P6-24	**THW/2-1**	THW/P8-01
ICC/P5-01	FTP/P6-25	**THW/2-2Ra**	THW/P8-02
ICC/P5-02	FTP/P6-26	**THW/2-2Rb**	THW/P8-03
ICC/P5-03	FTP/P6-27	**THW/2-3Ra**	
ICC/P5-04	FTP/P6-28	**THW/2-4Ra**	
ICC/P5-05	FTP/P6-29	THW/P7-01	
ICC/P5-06	FTP/P6-30	THW/P7-02	
	FTP/P6-31	THW/P7-03	
	FTP/P6-32	THW/P7-04	
	FTP/P6-33	THW/P7-05	
	FTP/P6-34	THW/P7-06	
	FTP/P6-35	THW/P7-07	
	FTP/P6-36	THW/P7-08	
	SEE/1-1Ra	THW/P7-09	
	SEE/1-1Rb	THW/P7-11	
	SEE/1-1Rc	THW/P7-12	
	IFE/1-1	THW/P7-13	
	IFE/1-2	THW/P7-14	
	IFE/1-3	THW/P7-15	
	IFE/1-4	THW/P7-16	
	IFE/1-5	THW/P7-17	
	IFE/P6-01	ICC/P7-01	
	IFE/P6-02	ICC/P7-02	
	IFE/P6-03		
	IFE/P6-04		
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