

22nd IAEA Fusion Energy Conference

PROGRAMME COMMITTEE

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Kikuchi, M. (CHAIR) (Japan)	

Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date	12 October 2008	13 October 2008	14 October 2008	15 October 2008	16 October 2008	17 October 2008	18 October 2008
08:45-10:30	WELCOME Fusion Pioneers Memorial Session (Chair: G.S. Lee, Rep. of Korea)	OV/3 (Iyoshi, A., Japan)	P2 (p. 16)	OV/5 (Pan, C., China)	P4 (p. 34)	EX/7 & PD (Kruglyakov, E.P., Russia)	EX/10 & TH/8 (Lopes Cardozo, N.J., Netherlands)
11:00-12:45	OV/1 (Goldston, R., USA)	EX/1 (Takamura, S., Japan)	P2	EX/3 & TH/1 (Forkelab, M., USA)	P4	IF/1 & SE/1 & FT/2 (Atzeni, S., Italy)	FT/4 (Noda, N., Japan)
14:10-16:15	OV/2 (Llewellyn Smith, C., UK)	OV/4, (Kaw, P.K., India)	P3 (p. 24)	EX/4 & TH/2 (Kamada, Y., Japan)	P5 (p. 46)	EX/8 & TH/6 (Szymakowski, E., USA)	S/1 (Matsuda, S., Japan)
16:45-18:30	FT/1 (Majabadi, F., USA)	EX/2 (Kwon, M., Korea Rep.)	P3	IT/1 (Tran, M.Q., Switzerland)	P5	EX/9 & TH/7 (Chatelet, M., France)	S/1, C (Kikuchi, M., Japan)
	Reception			50 th Anniversary Evening Session (Jacquinot, J., France) (20:00)	Banquet	Evening Session at CERN (20:30)	
				Aggourn			

Coffee Break

Lunch

Coffee Break

Aggourn

IAEA SECRETARIAT:

Scientific Secretaries: G. Mank
A. Louzeiro Malaquias

Conference Coordination: H. Schmid
K. Morrison

LOCATION OF THE CONFERENCE:

Palais des Nations
14, avenue de la Paix
1211 Geneva 10
Switzerland

LOCAL ORGANIZATION:

Host Government Liaison Officer:
Andreas Werthmueller
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WORKING LANGUAGE: English

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

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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
IT	ITER Activities
IF	Inertial Fusion Experiments and Theory
IC	Innovative Confinement Concepts
FT	Fusion Technology and Power Plant Design
SE	Safety, Environmental and Economic Aspects of Fusion
PD	Post-deadline

LIST OF CONTRIBUTIONS

2	Pioneers Memorial Session lectures
4	"50th year anniversary" evening lectures
22	Overview talks
2	Overview posters
81	Regular talks (21 Rapporteured papers)
426	Regular Poster presentations
2	Post deadline talks
10	Post deadline posters
5	Summary talks

EXPLANATIONS/REQUESTS

Overview posters will be exhibited during the entire 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 already 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 THE 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 Government 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 2009:
<http://www-naweb.iaea.org/iaea.org/napc/physics/index.htm>.

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All IAEA publications may be ordered from the Sales and Promotion Unit, International Atomic Energy Agency, P.O. Box 100, A-1400 Vienna, Austria.
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Sunday, 12 October 2008

16:30–19:30 Registration

Monday, 13 October 2008

MORNING SESSIONS

08:45–10:30 **Welcome/Fusion Pioneers Memorial**
Chair: Lee, G.S. (Korea, Rep. of)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
Opening, Welcome Address				
O/1	Sokolov, Y.	IAEA		
O/2	Host Government Representatives	Switzerland		
FPM/1	Troyon, F.	European Commission	40	The 50 year History of Fusion Energy Research
FPM/2	Ikeda, K.	ITER	20	The Future of Fusion Energy Research

11:00–12:45 **Session OV/1: Overview-I**
Chair: Goldston, R. (USA)

OV/1-1	Fasoli, A.	Switzerland	25	Overview of Physics Research on the TCV Tokamak
OV/1-2	Romanelli, F.	European Commission	25	Overview of JET Results
OV/1-3	Oyama, N.	Japan	25	Overview of JT-60U Results Towards Establishment of Advanced Tokamak Operation
OV/1-4	Strait, E.J.	USA	25	DIII-D Research in Support of ITER

Monday, 13 October 2008

AFTERNOON SESSIONS

14:10–16:15 Session OV/2: Overview-II
Chair: Llewellyn Smith, C. (UK)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
OV/2-1	Holtkamp, N.	ITER	25	The Status of the ITER Design
OV/2-2	Moses, E.I.	USA	25	Ignition on the National Ignition Facility: A Path Towards Inertial Fusion Energy
OV/2-3	Zohm, H.	Germany	25	Overview of ASDEX Upgrade Results
OV/2-4	Komori, A.	Japan	25	Development of Net-Current Free Heliotron Plasmas in the Large Helical Device
OV/2-5	Waelbroeck, F.L	USA	25	Theory and Observations of Magnetic Islands

16:45–18:30 Session FT/1: Fusion Technology-I
Chair: Najmabadi, F. (USA)

FT/1-1	Bak, J.S.	Korea, Rep. of	20	Overview of Recent Commissioning Results of KSTAR
FT/1-2	Garin, P.	France	20	The IFMIF/EVEDA Project: Outcome of the First Engineering Studies
FT/1-3	Nishitani, T.	Japan	20	Fusion Technology Development for DEMO in the Broader Approach Activities
FT/1-4	Klinger, T.	Germany	20	The Construction of the Wendelstein 7-X Stellarator
FT/1-5	Pizzuto, A.	Italy	20	The Fusion Advanced Studies Torus (FAST): A Proposal for an ITER Satellite Facility in Support of the Development of Fusion Energy

Monday, 13 October 2008

AFTERNOON POSTER SESSIONS

14:10–18:30 **Poster Session P1: Overview Posters**
All Overview Presentations display poster in this session
(Overview displays for the all week)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
OV/P1-1	Gryaznevich, M.	United Kingdom	Results of Joint Experiments and other IAEA Activities on Research Using Small Tokamaks
OV/5-2Rb	Fiksel, G.	USA	Overview of Results in the MST Reversed-Field Pinch Experiment

Tuesday, 14 October 2008

MORNING SESSIONS

8:45–10:30 Session OV/3: Overview-III
Chair: Iiyoshi, A. (Japan)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
OV/3-1	Gates, D.A.	USA	25	Overview of Results from the National Spherical Torus Experiment (NSTX)
OV/3-2	Meyer, H.	United Kingdom	25	Overview of Physics Results from MAST
OV/3-3	Giruzzi, G.	France	25	Investigation of Steady-State Tokamak Issues by Long Pulse Experiments on Tore Supra
OV/3-4	Wan, B.	China	25	Recent Experiments in the EAST and HT-7 Superconducting Tokamaks

11:00–12:45 Session EX/1: Scenario Development
Chair: Takamura, S. (Japan)

EX/1-1	Sakamoto, Y.	Japan	20	Development of Reversed Shear Plasmas with Large Bootstrap Current Fraction Towards Reactor Relevant Regime in JT-60U
EX/1-2	Rimini, F.G.	France	20	High β_N Regimes at JET: Progress Towards Steady-State Operation
EX/1-3	Doyle, E.J.	USA	20	Demonstration of ITER Operational Scenarios on DIII-D
EX/1-4Ra	Joffrin, E.H.	European Commission	20	Development of the "Hybrid" Scenario in JET
EX/1-4Rb	Petty, C.C.	USA		Advances in the Physics Basis of the Hybrid Scenario on DIII-D
EX/1-4Rc	Suzuki, T.	Japan		Development of Advanced Operation Scenarios in Weak Magnetic-Shear Regime on JT-60U
EX/1-5	Gruber, O.	Germany	20	Compatibility of ITER Scenarios with Full Tungsten Wall in ASDEX Upgrade

Tuesday, 14 October 2008

MORNING POSTER SESSIONS

**08:45–12:45 Poster Session P2:
Fusion Technology, Safety-Economics**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
FT/1-1	Bak, J.S.	Korea, Rep. of	Overview of Recent Commissioning Results of KSTAR
FT/1-2	Garin, P.	France	The IFMIF/EVEDA Project: Outcome of the First Engineering Studies
FT/1-3	Nishitani, T.	Japan	Fusion Technology Development for DEMO in the Broader Approach Activities
FT/1-4	Klinger, T.	Germany	The Construction of the Wendelstein 7-X Stellarator
FT/1-5	Pizzuto, A.	Italy	The Fusion Advanced Studies Torus (FAST): A Proposal for an ITER Satellite Facility in Support of the Development of Fusion Energy
FT/2-1	Yoshida, N.Y.	Japan	Reflectivity Reduction of Retro-Reflector Installed in LHD due to Plasma Surface Interaction
FT/3-1Ra	Kasugai, A.	Japan	Demonstration of 1 MW Quasi-CW Operation of 170 GHz Gyrotron and Progress of EC Technology for ITER
FT/3-1Rb	Litvak, A.	Russian Federation	Status of the Development in Russia of a Megawatt Power Gyrotrons for Fusion
FT/3-1Rc	Rzesnicki, T.	Germany	Experimental Investigations on the Pre-Prototype of the 170 GHz, 2 MW Coaxial Cavity Gyrotron for ITER
FT/4-1	Brooks, J.N.	USA	Plasma Surface Interaction Issues of an All-metal ITER
FT/4-2Ra	Philipps, V.	Germany	Development of Wall Conditioning and Tritium Removal Techniques in TEXTOR for ITER and Future Fusion Devices
FT/4-2Rb	Wright, G.M.	Netherlands	Hydrogenic Retention of High-Z Refractory Metals Exposed to ITER Divertor Relevant Plasma Conditions
FT/4-3Ra	Jitsukawa, S.	Japan	Irradiation Effects on Reduced Activation Ferritic/Martensitic Steels -Mechanical Properties and modelling-
FT/4-3Rb	Muroga, T.	Japan	Compatibility of Reduced Activation Ferritic/Martensitic Steels with Liquid Breeders
FT/4-4	Chernov, V.M.	Russian Federation	Structural Materials for Fusion Power Reactors - the RF R&D Activities in 2006-2008
FT/4-5Ra	Nightingale, M.P.S.	United Kingdom	Development of the JET Ion Cyclotron Resonance Frequency Heating System in Support of ITER
FT/4-5Rb	Vulliez, K.	France	Validation of the Load-Resilient Ion Cyclotron Resonance Frequency Antenna Concept on Tore Supra Plasmas

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
FT/P2-1	Gaganidze, E.	Germany	Mechanical Properties of Reduced Activation Ferritic/Martensitic Steels after High Dose Neutron Irradiation
FT/P2-2	Materna-Morris, E.	Germany	Microstructure and Tensile Properties in Reduced Activation 8-9% Cr Steels at Fusion Relevant He/dpa Ratios, dpa Rates and Irradiation Temperatures
FT/P2-3	Baluc, N.	Switzerland	Optimization of the Chemical Composition and Manufacturing Route for ODS RAF Steels for Fusion Reactor Application
FT/P2-4	Nagasaka, T.	Japan	Progress in Flibe Corrosion Study Toward Material Research Loop and Advanced Liquid Breeder Blanket
FT/P2-5	Tanigawa, H.	Japan	R&Ds on Li ₂ TiO ₃ Pebble Bed for Test Blanket Module in JAEA
FT/P2-6	Tsuru, D.T.	Japan	Achievements of the Water Cooled Solid Breeder Test Blanket Module of Japan to the Milestones for Installation in ITER
FT/P2-7	Chen, H.	China	Preliminary Safety Analysis for the Chinese ITER Dual-Functional Lithium-Lead Test Blanket Module
FT/P2-8	Liu, H.	China	Thermal-hydraulic Safety Study of Chinese Helium Cooled Solid Breeder Test Blanket Module for ITER
FT/P2-9	Feng, K.	China	Overview of Design and R&D of Solid Breeder TBM in China
FT/P2-10	Fischer, U.	Germany	Neutronics R&D Efforts in Support of the European Breeder Blanket Development Programme
FT/P2-11	Koidan, V.S.	Russian Federation	Study of Radiation-Damaged Fusion Materials under High-Power Plasma Stream
FT/P2-12	Kawamura, Y.	Japan	Studies and Developments of Tritium Recovery System for Blanket of Fusion Reactor in Japan Atomic Energy Agency
FT/P2-13	Jordanova, J.D.	Bulgaria	Assessment of Radiation Streaming Effect upon Radiation Loads to Inboard TF-coil of DEMO Utilizing HCLL Blanket
FT/P2-14	Kizane, G.	Latvia	Chemical Forms of Tritium in Be Pebbles after Different Treatments
FT/P2-15	Lyublinski, I.E.	Russian Federation	Main Results and Prospects of Lithium Capillary-Porous System Investigation as Tokamak Plasma Facing Material
FT/P2-16	Zalavutdinov, R.K.	Russian Federation	A-C:H Film Removal in H ₂ and H ₂ /N ₂ O Glow and Afterglow Discharge
FT/P2-17	Nozawa, T.	Japan	Evaluation on Failure Resistance to Develop Design Basis for Quasi-Ductile Silicon Carbide Composites for Fusion Application
FT/P2-18	Houry, M.H.	France	Development and Operation of an ITER relevant Inspection Robot
FT/P2-19	Ochiai, K.	Japan	Advancement of Nuclear Analysis Method for ITER
FT/P2-20	Luchetta, A.	Italy	Technology Progress in Real-Time Control of MHD Modes at RFX-mod

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
FT/P2-21	Escourbiac, F.	France	Definition of Workable Acceptance Criteria for the ITER Divertor Plasma Facing Components through Systematic Experimental Analysis
FT/P2-22	Ozeki, T.	Japan	Development and Demonstration of Remote Experimental System with High Security in JT-60U
FT/P2-23	Callis, R.W.	USA	Alternate Concepts for Generating High Speed DT Pellets for Fuelling ITER
FT/P2-24	Gantenbein, G.	Germany	Experimental Results of Series Gyrotrons for the Stellarator W7-X
FT/P2-25	Imai, T.	Japan	Development of 1 MW Gyrotron and Progress of ECH System for the GAMMA 10 Tandem Mirror in Tsukuba
FT/P2-26	Moriyama, S.M.	Japan	Long Pulse/High Power ECRF System Development in JT-60U
FT/P2-27	Hanada, M.H.	Japan	Development of Long Pulse Neutral Beam Injector on JT-60U for JT-60SA
FT/P2-28	Sasao, M.	Japan	Development of an Energetic He ⁰ Beam Injector for Fusion Application
FT/P2-29	Jones, T.T.C.	United Kingdom	The Physics of Design and Operation of High Power Neutral Beam Injection Ducts - Extrapolating JET Experience to ITER Situations
FT/P2-30	Ivanov, A.A.	Russian Federation	Focused Neutral Beams with Low Chaotic Divergence for Plasma Heating and Diagnostics in Magnetic Fusion Devices
FT/P2-31	Minea, T.M.	France	Beam-plasma Interaction in the ITER NBI
SE/1-1	Ward, D.J.	United Kingdom	Economic Consequences of Fusion Materials Development
SE/P2-1	Yamazaki, K.	Japan	Burning Plasma Simulation and Environmental Assessment of Tokamak, Spherical Tokamak and Helical Reactors

Tuesday, 14 October 2008

AFTERNOON SESSIONS

14:10–16:15 Session OV/4: Overview IV
Chair: Kaw, P.K. (India)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
OV/4-1	Azechi, H.	Japan	25	Plasma Physics Study and Laser Development for the Fast Ignition Realization Experiment (FIREX) Project
OV/4-2	Garbet, X.	France	25	Turbulence Theory and Gyrokinetic Codes
OV/4-3	Duan, X.R.	China	25	Overview of Experimental Results on HL-2A
OV/4-4	Marmar, E.S.	USA	25	Overview of the Alcator C-Mod Research Program
OV/4-5	Castejón, F.	Spain	25	Overview of TJ-II Experiments

16:45–18:30 Session EX/2: Transport
Chair: Kwon, M. (Korea, Rep. of)

EX/2-1	Saibene, G.	European Commission	20	Results of the Variable Toroidal Field Ripple Experiments in JET
EX/2-2	Akers, R.J.	United Kingdom	20	Transport Studies in the MAST Spherical Tokamak
EX/2-3	Coda, S.	Switzerland	20	Full Bootstrap Discharge Sustainment in Steady State in the TCV Tokamak
EX/2-4	Mantica, P.	Italy	20	Experimental Study of the Ion Critical Gradient Length and Stiffness Level and the Impact of Rotational Shear in JET
EX/2-5	Talmadge, J.N.	USA	20	Neoclassical Currents and Transport Studies in HSX at 1 Tesla

Tuesday, 14 October 2008

AFTERNOON POSTER SESSIONS

**14:10–18:30 Poster Session P3: Transport Barriers,
Theory-Wall, Fusion Technology**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/1-1	Sakamoto, Y.	Japan	Development of Reversed Shear Plasmas with Large Bootstrap Current Fraction towards Reactor Relevant Regime in JT-60U
EX/1-2	Rimini, F.G.	France	High β Regimes at JET: Progress Towards Steady-State Operation
EX/1-3	Doyle, E.J.	USA	Demonstration of ITER Operational Scenarios on DIII-D
EX/1-4Ra	Joffrin, E.H.	European Commission	Development of the "Hybrid" Scenario in JET
EX/1-4Rb	Petty, C.C.	USA	Advances in the Physics Basis of the Hybrid Scenario on DIII-D
EX/1-4Rc	Suzuki, T.	Japan	Development of Advanced Operation Scenarios in Weak Magnetic-Shear Regime on JT-60U
EX/1-5	Gruber, O.	Germany	Compatibility of ITER Scenarios with Full Tungsten Wall in ASDEX Upgrade
EX/P3-1	Yuh, H.Y.	USA	Suppression of Turbulent Transport in NSTX Internal Transport Barriers
EX/8-3	De Vries, P.C.	United Kingdom	Internal Transport Barrier Dynamics with Plasma Rotation in JET
EX/8-2Ra	Nagaoka, K.	Japan	Characteristics of High-Ion-Temperature Plasmas Heated by Neutral Beams in the Large Helical Device
EX/8-2Rb	Ida, K.	Japan	Dynamics of Ion Internal Transport Barrier in LHD Heliotron and JT-60U Tokamak Plasmas
EX/8-1Ra	Sakamoto, R.	Japan	High Density High Performance Plasma with Internal Diffusion Barrier in Large Helical Device
EX/8-1Rb	Ohdachi, S.	Japan	Two Approaches to the Reactor-relevant High-beta Plasmas with Profile Control in the Large Helical Device
EX/P3-2	Takenaga, H.	Japan	Characteristics of Internal Transport Barrier under Reactor Relevant Condition in JT-60U Weak Shear Plasmas
EX/P3-3	Kamada, Y.	Japan	Correlation Between the Edge and The Internal Transport Barriers in JT-60U
EX/8-4	Burrell, K.H.	USA	Edge Pedestal Control in Quiescent H-Mode Discharges in DIII-D Using Co Plus Counter Neutral Beam Injection
EX/P3-4	Beurskens, M.N.A.	United Kingdom	Pedestal Dynamics in ELMy H-mode Plasmas in JET
EX/8-5	Urano, H.	Japan	Heat Transport and Pedestal Structure of H-mode in the Variation of Current Density Profiles in JT-60U

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/P3-5	Groebner, R.J.	USA	Progress Towards a Predictive Model for Pedestal Height in DIII-D
EX/P3-6	Turri, G.	Switzerland	Global Plasma Oscillations in Electron Internal Transport Barriers in TCV
EX/P3-7	Wolfrum, E.	Germany	Pedestal Studies at ASDEX Upgrade
EX/P3-8	Dong, Y.B.	China	Link of Internal Transport Barriers and the Low Rational q Surface on HL-2A
EX/P3-9	Carraro, L.	Italy	Improved Confinement with Internal Electron Temperature Barriers in RFX-mod
EX/P3-10	Lebedev, S.V.	Russian Federation	Counter-NBI Assisted LH Transition in Low Density Plasmas in the TUMAN-3M
EX/P3-11	Minami, T.M.	Japan	Simultaneous Realization of High Density Edge Transport Barrier and Improved L-mode on CHS
FT/P3-1	Kim, Y.S.	Korea, Rep. of	Commissioning Results of the KSTAR Cryogenic System
FT/P3-2	Oh, Y.K.	Korea, Rep. of	Commissioning Results of the KSTAR Superconducting Magnet System for the First Plasma Operation
FT/P3-3	Park, M.K.	Korea, Rep. of	Operation Results of KSTAR Integrated Control System for First Plasma
FT/P3-4	Yang, H.Y.	Korea, Rep. of	KSTAR Assembly and Vacuum Commissioning for the 1 st Plasma
FT/P3-5	Cucchiario, A.	Italy	Load Assembly Design of the FAST Machine
FT/P3-6	Panek, R.	Czech Republic	Status of the COMPASS Tokamak Re-installation in IPP ASCR
FT/P3-7	Tazhibayeva, I.	Kazakhstan	KTM Tokamak Project. Present and Future Activity
FT/P3-8	Heitzenroeder, P.J.	USA	Design and Construction Solutions in the Accurate Realization of NCSX Magnetic Fields
FT/P3-9	Tobita, K.	Japan	Design Issues on Compact Low Aspect Ratio DEMO Reactor, SlimCS
FT/P3-10	Kawashima, H.	Japan	Divertor Design Study on Compact DEMO Reactor for Handling of Huge Exhaust Power
FT/P3-11	Calabro, G.	Italy	FAST Plasma Scenarios and Equilibrium Configurations
FT/P3-12	Goldston, R.J.	USA	An Experiment to Tame the Plasma Material Interface
FT/P3-13	Najmabadi, F.	USA	Compact Stellarator Power Plants - Prospects, Technical Issue, and R&D Directions
FT/P3-14	Peng, Y.K.M.	USA	Effects of Physics Conservatism and Aspect Ratio on Remote Handling for Compact Component Test Facilities (CTFs)
FT/P3-15	Garcia, J.	France	Integrated Modelling of DEMO Advanced Scenarios with the CRONOS Suite of Codes

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
FT/P3-16	Norajitra, P.	Germany	Status of Development of the EU He-cooled Divertor for DEMO
FT/P3-17	Imagawa, S.	Japan	Concept of Magnet Systems for LHD-type Reactor.
FT/P3-18	Kozaki, Y.	Japan	Design Windows and Cost Analysis on Helical Reactor
FT/P3-19	Mitarai, O.M.	Japan	The Low Temperature and High Density Ignition in the Helical Reactor FFHR2m Based on LHD Experiments
FT/P3-20	Galvao, R.M.O.	Brazil	Multi-functional Compact Tokamak Reactor Concept
FT/P3-21	Wu, Y.	China	The Fusion-fission Hybrid Reactor for Energy Production - A Practical Path to Fusion Application
FT/P3-22	Kuteev, B.V.	Russian Federation	Conceptual Analysis of a Tokamak-Reactor with Lithium Dust Jet
FT/P3-23	Coppi, B.	Italy	Relevant Developments for the Ignitor Program and Burning Plasma Regimes of Special Interest
FT/P3-24	Wan, Y.	China	Risk Analysis and Optimization of Safe Operation for Advanced Superconducting Tokamak
FT/P3-25	Hanada, M.H.	Japan	Physical Design of MW-class Steady-state Spherical Tokamak, QUEST
FT/P3-26	Khripunov, V.I.	Russian Federation	3-D Study of PFC and Dust Activation in ITER
TH/3-4	Spong, D.A.	USA	Energetic Particle Physics Issues for 3-dimensional Toroidal Configurations
TH/3-5	Vdovin, V.L.	Russian Federation	Critical Problems in Plasma Heating/CD in Large Fusion Devices and ITER
TH/6-1	Toda, S.	Japan	Theoretical Modelling of Transport Barriers in Helical Plasmas
TH/P3-1	Murakami, M.	USA	Off-Axis Neutral Beam Current Drive for Advanced Scenario Development in DIII-D
TH/P3-2	Yavorskij, V.	Austria	Fokker-Planck Modelling of NBI Deuterons in ITER
TH/P3-3	Salewski, M.	Denmark	Impact of ICRH on the Measurement of Fast Ions by Collective Thomson Scattering in ITER
TH/P3-4	Pokol, G.	Hungary	Criteria for Runaway Electron Generation in Tokamak Disruptions
TH/P3-5	Biancalani, A.	Italy	Shear Alfvén Wave Continuous Spectrum in the Presence of a Magnetic Island
TH/P3-6	Cardinali, A.	Italy	Minority Ions Acceleration by ICRH: A Tool for Investigating Burning Plasma Physics
TH/P3-7	Zonca, F.	Italy	Kinetic Theory of Geodesic Acoustic Modes: Radial Structures and Nonlinear Excitations
TH/P3-8	Fukuyama, A.	Japan	Advanced Modelling of Cyclotron Wave Heating and Current Drive in Toroidal Plasmas Based on Integro-Differential Full Wave Analysis

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
TH/P3-9	Todo, Y.	Japan	Simulation Study of Interaction between Energetic Ions and Alfvén Eigenmodes in LHD
TH/P3-10	Kukushkin, A.B.	Russian Federation	Electron Cyclotron Power Losses in Fusion Reactor-Grade Tokamaks: Scaling Laws for Spatial Profile and Total Power Loss
TH/P3-11	Kolesnichenko, Y.I.	Ukraine	Sub-GAM Modes in Stellarators and Tokamaks
TH/P3-12	Yakovenko, Y.V.	Ukraine	Effect of the Toroidal Asymmetry on the Structure of TAE Modes in Stellarators
TH/P3-13	Yatsenko, N.M.	Ukraine	Influence of Anisotropy on Radiation of Any Linear Antenna System in Magneto-plasma
TH/P3-14	Chen, L.	USA	Gyrokinetic Simulation of Energetic Particle Turbulence and Transport
TH/P3-15	Fu, G.Y.	USA	Energetic Particle-induced Geodesic Acoustic Mode
TH/P3-16	Ram, A.K.	USA	Electron Cyclotron Current Drive in Spherical Tokamaks with Application to ITER
TH/P3-17	Wright, J.C.	USA	ITER Relevant Simulations of Lower Hybrid and Ion Cyclotron Waves with Self-Consistent Non-Maxwellian Species
TH/P3-18	Bustos Molina, A.	Spain	Kinetic Simulation of Heating and Collisional Transport in a 3D Tokamak

Wednesday, 15 October 2008

MORNING SESSIONS

8:45–10:30 Session OV/5: Overview V
Chair: Pan, C. (China)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
OV/5-1	Tuccillo, A. A.	Italy	25	Overview of the FTU Results
OV/5-2Ra	Martin, P.	Italy	25	Overview of the RFX-mod Results
OV/5-2Rb	Fiksel, G.	USA		Overview of Results in the MST Reversed-Field Pinch Experiment
OV/5-3	Norreys, P.A.	United Kingdom	25	Recent Studies in Fast Electron Energy Transport Relevant to Fast Ignition Inertial Fusion
OV/5-4	Gusev, V.K.	Russian Federation	25	Overview of Results Obtained at the Globus-M Spherical Tokamak

11:00–12:45 Session EX/3 & TH/1: Momentum Transport
Chair: Porkolab, M. (USA)

TH/1-1	<u>T. S. Hahm</u> (Diamond, P.H.)	USA	20	Physics of Non-Diffusive Turbulent Transport of Momentum and the Origins of Spontaneous Rotation in Tokamaks
EX/3-1	Yoshida, M.	Japan	20	Formation Mechanism of Toroidal Rotation Profile and Characteristics of Momentum Transport in JT-60U
EX/3-2	Kaye, S.M.	USA	20	Momentum Transport in Electron-Dominated Spherical Torus Plasmas
EX/3-3	Tala, T.	Finland	20	Experimental Evidence on Inward Momentum Pinch on JET and Comparison with Theory and Modelling
EX/3-4	Solomon, W.M.	USA	20	Developments in Predictive Understanding of Plasma Rotation on DIII-D

Wednesday, 15 October 2008

MORNING POSTER SESSIONS

**08:45–12:45 Poster Session P4:
SOL, Impurities, Experiments-Wall,
Theory-Divertor, Innovative Confinement,
Scenarios**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/P4-1	Kendl, A.	Austria	Hydrocarbon Characteristics in Fusion Edge Plasmas from Electron-Molecule and Ion-Surface Collision Experiments
EX/P4-2	Ekedahl, A.	France	Operational Limits during High Power Long Pulses in Tore Supra
EX/P4-3	Rohde, V.	Germany	Dynamic and Static Deuterium Inventory in ASDEX Upgrade with Tungsten First Wall
EX/P4-4	Doerner, R.P.	USA	Issues Associated with Co-deposition of Deuterium with ITER Materials
EX/P4-5	Castaldo, C.	Italy	Detection of Dust Particles in FTU
EX/P4-6	Mazzitelli, G.	Italy	Status and Perspective of the Liquid Material Experiments in FTU and ISTTOK
EX/P4-7	Ashikawa, N.	Japan	Characterization of Heated Dust Particles Using Infrared and Dynamic Images in LHD
EX/P4-8	Hino, T.	Japan	Hydrogen Concentration of Co-deposited Carbon Films Produced in the Vicinity of Local Island Divertor in Large Helical Device
EX/P4-9	Kaita, R.	USA	Plasma Performance Improvement with Lithium-Coated Plasma-Facing Components in NSTX
EX/P4-10	Gusev, V.K.	Russian Federation	Plasma-Wall Interaction Study in the Open Divertor of Globus-M Spherical Tokamak
EX/P4-11	Silva, C.G.	Portugal	Overview of Recent ISTTOK Results
EX/P4-12	Zushi, H.	Japan	Active Particle Control Experiments and Critical Flux Discriminating between the Wall Retention and Release in the CPD Spherical Tokamak
EX/P4-13	Khimchenko, L.N.	Russian Federation	Study of Dust Morphology, Composition and Surface Growth under ITER-relevant Energy Load in Plasma Gun QSPA-facility
EX/P4-14	Vershkov, V.A.	Russian Federation	Experiments with Lithium Gettering of the T-10 Tokamak.
EX/P4-15	Khorshid, P.	Iran, Isl. Rep. of	Overview of Experimental Studies on IR-T1 Tokamak
EX/P4-16	Ueda, Y.	Japan	Localized Tungsten Deposition in Divertor Region in JT-60U
EX/P4-17	Lisgo, S.	United Kingdom	The Influence of Filaments on Scrape-Off Layer Transport

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/P4-18	Ohno, N.	Japan	Statistical Analysis of Fluctuation Characteristics at High- and Low-Field Sides in L-mode SOL Plasmas of JT-60U
EX/P4-19	Groth, M.	USA	Effect of Cross-field Drifts and Core Rotation on Flows in the Main Scrape-Off Layer of DIII-D L-mode Plasmas
EX/P4-20	Pitts, R. A.	Switzerland	SOL Transport in TCV
EX/P4-21	Petrie, T.W.	USA	The Effect of Magnetic Balance and Particle Drifts on Radiating Divertor Behavior in DIII-D
EX/P4-22	Soukhanovskii, V. A.	USA	Divertor Heat Flux Mitigation in High-Performance H-mode Plasmas in the National Spherical Torus Experiment
EX/P4-23	Stroth, U.	Germany	Experimental Investigation of Turbulence at the Transition from Closed to Open Field Lines
EX/P4-24	Masuzaki, S.	Japan	Advanced Divertor Scenario in the Large Helical Device
EX/9-4	Kobayashi, M.	Japan	Study on Impurity Screening in Edge Ergodic Layer of Large Helical Device
EX/P4-25	Nakano, T.	Japan	Impurity Accumulation in the Main Plasma and Radiation Processes in the Divertor Plasma of JT-60U
EX/P4-26	Burhenn, R.	Germany	On Impurity Handling in High Performance Stellarator/Heliatron Plasmas
EX/P4-27	Ferron, J.R.	USA	Development in DIII-D of High β Discharges Appropriate for Steady-State Tokamak Operation with Burning Plasmas
EX/9-1	Tsitrone, E.	France	Deuterium Inventory in Tore Supra : Reconciling Particle Balance and Post Mortem Analysis
EX/9-2	Kallenbach, A.	Germany	Non-Boronized Operation of ASDEX Upgrade with Full-Tungsten Plasma Facing Components
EX/9-3	Rudakov, D.L.	USA	Dust Studies in DIII-D and TEXTOR
TH/3-1	Poli, E.	Germany	Behaviour of Turbulent Transport in the Vicinity of a Magnetic Island
TH/3-2	Hudson, S.R.	USA	Temperature Gradients are Supported by Cantori in Chaotic Fields
TH/3-3	Shimizu, K.	Japan	Kinetic Modelling of Impurity Transport in Detached Plasma for Integrated Divertor Simulation with SONIC (SOLDOR/NEUT2D/IMP/EDDY)
TH/7-1	Ito, A.I.	Japan	Molecular Dynamics Simulation of Chemical Sputtering of Hydrogen Atom on Layer Structured Graphite
TH/P4-1	Pacher, G.W.	Canada	Operation Window with Mutually Consistent Core SOL Divertor Conditions in ELMy H-Mode: Prospects for Long Pulse Operation in ITER and DEMO
TH/P4-2	Ghendrih, P.	France	Turbulence and Flow Interplay in the Tokamak Edge Plasma

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
TH/P4-3	Coster, D.P.	Germany	Recent Results from Edge Modelling on ASDEX Upgrade
TH/P4-4	Feng, Y.	Germany	Divertor-Transport Study for Helical Devices
TH/P4-5	Gál, K.	Hungary	Mitigation of ELMs and Disruptions by Pellet Injection
TH/P4-6	Maddaluno, G.M.	Italy	Edge Plasma Issues of the Tokamak FAST (Fusion Advanced Studies Torus) in Reactor Relevant Conditions
TH/P4-7	Hamaguchi, S.	Japan	Generation of Dust Seeds by Sputtering of Carbon-based Plasma Facing Materials under Low-energy H/D/T Ion Bombardment
TH/P4-8	Ohya, K.	Japan	Modelling of Hydrocarbon Re-deposition in the Gaps of Castellated Structures
TH/P4-9	Takizuka, T.	Japan	Two-dimensional Full Particle Simulation of the Flow Patterns in the Scrape-off-layer Plasma for Upper- and Lower- Null Point Divertor Configurations in Tokamak
TH/P4-10	Park, G.	Korea, Rep. of	What is the RMP Driven Transport and How Does it Affect ELMs?
TH/P4-11	Spineanu, F.	Romania	Vortex Nucleation in Strongly Sheared Poloidal Rotation and Effects on Velocity Saturation and Generation of ELM modes
TH/P4-12	Lukash, V.E.	Russian Federation	Numerical Modelling of Li Limiter Experiments in T11-M Tokamak
TH/P4-13	Mavrin, A.A.	Russian Federation	Computation of Radial Electric Field in the Turbulent Edge Plasma of the T-10 Tokamak
TH/P4-14	Rajkovic, M.	Serbia and Montenegro	Characteristics of Intermittency and ELM Dynamics in the Edge Region of Magnetic Confinement Devices
TH/P4-15	Castejón, F.	Spain	Flux-expansion Divertor Studies in TJ-II
TH/P4-16	Daybelge, U.	Turkey	Bifurcation Behaviour of Rotation Velocities in Collisional Edge Plasma with Steep Gradient
TH/P4-17	D'Ippolito, D.A.	USA	Edge Turbulence, Blob Generation, and Interaction with Sheared Flows
TH/P4-18	Hegna, C.C.	USA	Intermediate Nonlinear Regimes of Line-tied g Mode and Ballooning Instability
TH/P4-19	Izzo, V.A.	USA	RMP Enhanced Transport and Rotational Screening in DIII-D Simulations
TH/P4-20	Krasheninnikov, S.I.	USA	Theory and Modelling of Edge Plasma Transport, Plasma-Wall Interactions, and Dust Dynamics
TH/P4-21	Pankin, A.Y.	USA	Effects of Transport and Non-thermal Particles on Kinetic H-mode Pedestal Evolution
TH/P4-22	Xu, X.Q.	USA	Fully Nonlinear Edge Gyrokinetic Simulations of Kinetic Geodesic-Acoustic Modes and Boundary Flows

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
IC/P4-1	Hoffman, A.L.	USA	Hot Steady-State FRCs and the Field Reversed Mirror Concept
IC/P4-2	Inomoto, M.	Japan	Formation and Sustainment of Field-reversed Configuration by Rotating Magnetic Field with Spatial High-harmonic Components
IC/P4-3	Belova, E.V.	USA	Simulation Studies of Field-Reversed Configurations with Rotating Magnetic Field Current Drive
IC/P4-4	Farengo, R.	Argentina	Current Drive and Heating in a D ³ He FRC Reactor, Relaxation in a Flux Core Spheromak and Oscillating Field Current Drive
IC/P4-5	Jarboe, T.R.	USA	Spheromak Formation by Steady Inductive Helicity Injection
IC/P4-6	Majeski, R.	USA	Performance Projections for the Lithium Tokamak eXperiment (LTX)
IC/P4-7	Kotschenreuther, M.	USA	The Super X Divertor (SXD) and High Power Density Experiment (HPDX)
IC/P4-8	Ryutov, D.D.	USA	A Snowflake Divertor: A Possible Way of Improving the Power Handling in Future Fusion Facilities
IC/P4-9	Kruglyakov, E.P.	Russian Federation	Thermonuclear Prospects of Modern Mirror Systems
IC/P4-10	Soto, L.	Chile	Fusion Studies Using Plasma Focus Devices from Hundred of Kilojoules to Less than One Joule. Scaling, Stability and Fusion Mechanisms
IC/P4-11	Yasaka, Y.	Japan	Studies on Plasma Direct Energy Converters for Thermal and Fusion-Produced Ions Using Slanted Cusp Magnetic and Distributed Electric Fields
IC/P4-12	Garnier, D.T.	USA	Confinement Improvement with Magnetic Levitation of a Superconducting Dipole
IC/P4-13	Wurden, G.A.	USA	FRCHX Magnetized Target Fusion HEDLP Experiments

Wednesday, 15 October 2008

AFTERNOON SESSIONS

**14:10–16:15 Session EX/4 & TH/2: ELMs and Pedestal
Chair: Kamada, Y. (Japan)**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
EX/4-1	Evans, T.E.	USA	20	Plasma Performance in DIII-D ELM-Suppressed RMP H-modes with ITER Similar Shapes
EX/4-2	Liang, Y.	Germany	20	Active Control of Type-I Edge Localized Modes with $n = 1$ and $n = 2$ Fields on JET
TH/2-1Ra	Becoulet, M.	France	20	Physics of Penetration of Resonant Magnetic Perturbations Used for Type I Edge Localized Modes Suppression in Tokamaks.
TH/2-1Rb	Strauss, H.R.	USA		MHD Simulation of Resonant Magnetic Perturbations and ELMs
EX/4-3Ra	Fundamenski, W.	United Kingdom	20	ELM filament Heat Loads on Plasma Facing Components in JET and ITER
EX/4-3Rb	Eich, T.	Germany		Divertor Heat Loads due to Edge Localized Modes in ASDEX Upgrade and JET
EX/4-4Ra	Asakura, N.	Japan	20	Investigations of Impurity Seeding and Radiation Control for Long-pulse and High-density H-mode Plasmas in JT-60U
EX/4-4Rb	Rapp, J.	Germany		Integrated Scenario with Type-III ELMy H-mode Edge: Extrapolation to ITER
EX/4-5	Lang, P.T.	Germany	20	Investigating Pellet Physics for ELM Pacing and Particle Fueling in ITER

Wednesday, 15 October 2008

AFTERNOON SESSIONS (continuation)

16:45–18:30 Session IT/1: ITER-1
Chair: Tran, M.Q. (Switzerland)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
IT/1-1	Alejaldre, C.	ITER	20	ITER on the Way to Become the First Fusion Nuclear Installation
IT/1-2	Hawryluk, R.J.	USA	20	Principle Physics Developments Evaluated in the ITER Design Review
IT/1-3	Weng, Peide	ITER	20	Results of ITER Superconducting Magnet R&D
IT/1-4	Lowry, C.G.	ITER	20	Progress in Design and R&D on ITER Plasma Facing Components
IT/1-5	Thomas, P.R.	European Commission	20	ELM Physics and ELM Mitigation in ITER

Wednesday, 15 October 2008

AFTERNOON POSTER SESSIONS

14:10–18:30 Poster Session P5: Momentum Transport, Turbulence

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/P5-1	Yoshinuma, M.	Japan	Observations of Spontaneous Toroidal Flow on LHD
EX/3-1	Yoshida, M.	Japan	Formation Mechanism of Toroidal Rotation Profile and Characteristics of Momentum Transport in JT-60U
EX/3-2	Kaye, S.M.	USA	Momentum Transport in Electron-Dominated Spherical Torus Plasmas
EX/3-3	Tala, T.	Finland	Experimental Evidence on Inward Momentum Pinch on JET and Comparison with Theory and Modelling
EX/2-2	Akers, R.J.	United Kingdom	Transport Studies in the MAST Spherical Tokamak
EX/3-4	Solomon, W.M.	USA	Developments in Predictive Understanding of Plasma Rotation on DIII-D
EX/P5-2	Degrassie, J.S.	USA	Intrinsic Rotation in H-Mode Pedestal in DIII-D
EX/P5-3	Prager, S.C.	USA	Momentum Transport from Tearing Instability
EX/P5-4	Rice, J.E.	USA	Counter-current Rotation and ITB Formation in Alcator C-Mod LHCD Plasmas
EX/P5-5	Severo, J.H.F.	Brazil	Measurement of Temporal Evolution of Plasma Rotation in the TCABR Tokamak
EX/2-4	Mantica, P.	Italy	Experimental Study of the Ion Critical Gradient Length and Stiffness Level and the Impact of Rotational Shear in JET
EX/2-1	Saibene, G.	European Commission	Results of the Variable Toroidal Field Ripple Experiments in JET
EX/2-3	Coda, S.	Switzerland	Full Bootstrap Discharge Sustainment in Steady State in the TCV Tokamak
EX/P5-6	Tanaka, H.	Japan	Experimental Investigation of Particle Pinch Associated with Turbulence in LHD Heliotron and JT-60U Tokamak Plasmas
EX/2-5	Talmadge, J.N.	USA	Neoclassical Currents and Transport Studies in HSX at 1 Tesla
EX/P5-7	Fukumoto, N.	Japan	Investigation of Compact Toroid Penetration for Fuelling Spherical Tokamak Plasmas on CPD
EX/P5-8	Petrov, Y.V.	Russian Federation	Central Fueling of Globus-M Plasma with the Help of Coaxial Plasma Gun.
EX/P5-9	Weller, A.	Germany	International Stellarator/Heliotron Database Activities on High- β Confinement and Operational Boundaries

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/P5-10	Inagaki, S.	Japan	Radial Interaction in Dynamic Heat Transport of LHD Plasmas
EX/P5-11	Fukuda, T.	Japan	Impact of Magnetic Shear Modification on Confinement and Turbulent Fluctuations in LHD Plasmas
EX/P5-12	Kitajima, S.	Japan	Density Collapse in Improved Confinement Mode on Tohoku University Helic
EX/P5-13	Kobayashi, S.	Japan	Effect of Bumpy Magnetic Field on Energy Confinement in NBI Plasmas of Heliotron J
EX/P5-14	Shchepetov, S.V.	Russian Federation	Fast Transport Transitions in High Shear L-2M Stellarator: Role of Moderate-Order Rational Magnetic Surfaces
EX/P5-15	Pochelon, A.	Switzerland	Physics Insight and Performance Benefit in MHD and Energy Transport from Plasma Shaping Experiments in the TCV Tokamak
EX/P5-16	Sakharov, N.V.	Russian Federation	Study of Globus-M low Aspect Ratio Plasma in Improved Confinement Regime.
EX/P5-17	Valovic, M	United Kingdom	Confinement and Fueling in MAST
EX/P5-18	Razumova, K.A.	Russian Federation	Tokamak Plasma Self-Organization and Possibility to Have the Peaked Density Profile in ITER
EX/P5-19	Ryter, F.	Germany	Simultaneous Analysis of Ion and Electron Heat Transport by Power Modulation in JET
EX/P5-20	Maslov, M.	Switzerland	Density Profile Behaviour in JET H-mode Plasmas
EX/P5-21	Ding, W.	USA	Particle Transport and Electron Density Relaxation Due to Stochastic Magnetic Fields in the MST Reversed Field Pinch
EX/P5-22	Puiatti, M.E.	Italy	High Density Physics in Reversed Field Pinches: Comparison with Tokamaks and Stellarators
EX/P5-23	Sun, H.J.	China	Non-local Transport Phenomenon with SMBI on HL-2A
EX/P5-24	Ding, X.	China	Observation of a Natural Particle Transport Barrier in HL-2A Tokamak
EX/P5-25	Koguchi, H.	Japan	High β Plasma in Improved Confinement Regime on the TPE-RX Reversed-Field Pinch Plasmas
EX/P5-26	Martines, E.	Italy	Transport Mechanisms in the outer Region of RFX-mod
EX/P5-27	Burdakov, A.V.	Russian Federation	Advances in Plasma Heating and Confinement in the GOL-3 Multiple Mirror Trap
EX/P5-28	Yoshida, Z.	Japan	High- β (Hot Electron) Plasma in Ring Trap 1 (RT-1)
EX/P5-29	López-Bruna, D.	Spain	Footprint of the Magnetic Configuration in ECH Plasmas of the TJ-II Flexible Helic

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/P5-30	Hidalgo, C.	Spain	Multi-scale Physics during Shear Flow Development in the TJ-II Stellarator
EX/P5-31	Estrada, T.	Spain	Characterization of the Perpendicular Rotation Velocity of the Turbulence by Reflectometry in the Stellarator TJ-II
EX/P5-32	Liu, A.D.	China	Three-dimension Spectral Characteristics of Low-frequency Zonal Flow in the Edge Plasma of HL-2A Tokamak
EX/10-1	McKee, G.R.	USA	Dependence of the L- to H-mode Power Threshold on Toroidal Rotation and the Link to Edge Turbulence Dynamics
EX/10-2Ra	Mazzucato, E.	USA	Turbulent Fluctuations with the Electro Gyro-scale in the National Spherical Torus Experiment
EX/10-2Rb	Gusakov, E.Z.	Russian Federation	Evolution of ETG-mode Scale Turbulence Spectra and Anomalous Electron Transport in Dynamic Experiments at FT-2 Tokamak
EX/P5-33	Yan, L.	China	Density Fluctuation of GAM Zonal Flows on the HL-2A Tokamak
EX/P5-34	Zhao, K.	China	Two Distinct Regimes of Turbulence in HL-2A Tokamak Plasmas
EX/P5-35	Schmitz, L.	USA	First Observation of Reduced Core Electron Temperature Fluctuations and Intermediate Wavenumber Density Fluctuations in H- and QH-mode Plasmas
EX/P5-36	Melnikov, A.V.	Russian Federation	The Study of the Statistical Properties of Electric Potential Oscillations in the T-10 Tokamak
EX/P5-37	Shelukhin, D.A.	Russian Federation	Spatial Structure of Density Fluctuations and Geodesic Acoustic Mode in T-10 Tokamak.
EX/P5-38	Conway, G.D.	Germany	Turbulence and Geodesic Acoustic Mode Behavioural Studies in ASDEX Upgrade Using Doppler Reflectometry
EX/P5-39	Skvortsova, N.N.	Russian Federation	Effect of ECRH Regime on Characteristics of Short-Wave Turbulence in Plasma of the L-2M Stellarator
EX/P5-40	Tynan, G.R.	USA	Multi-scale Nonlinear Turbulence Dynamics Studies
EX/P5-41	Furno, I.F.	USA	Turbulence and Transport in Simple Magnetized Toroidal Plasmas
EX/P5-42	Dunai, D.	Hungary	Comparison of Turbulence Measurement Results on the Wendelstein 7-AS Stellarator and the TEXTOR Tokamak
EX/P5-43	Ivanov, A. A.	Russian Federation	Steady-State Confinement of Anisotropic Hot Ion Plasma in the Gas Dynamic Trap
TH/1-1	Diamond, P.H.	USA	Physics of Non-Diffusive Turbulent Transport of Momentum and the Origins of Spontaneous Rotation in Tokamaks
TH/8-1	Holland, C.G.	USA	Validation of Gyrokinetic Transport Simulations Using DIII-D Core Turbulence Measurements

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
TH/8-2	Idomura, Y.	Japan	Conservative Global Gyrokinetic Toroidal Full-f 5D Vlasov Simulation
TH/8-3	Angioni, C.	Germany	Gyrokinetic Simulations of Impurity, He Ash and α Particle Transport and Consequences on ITER Transport Modelling

Wednesday, 15 October 2008

EVENING SESSIONS

**20:00–21:45 Session E/1:
“50-year Anniversary of Fusion Research”
Chair: Jacquinot, J. (France)**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
Marc-Auguste Pictet Prize	Société de Physique et d'Histoire Naturelle	Switzerland	15	"History of the Atom from the 19th Century to the Recent International Fusion Research"
E/1-1	Smirnov, V.	Russian Federation	15	Tokamak Foundation in Russia
E/1-2	Meade, D.	USA	25	Highlights of 50 Years of Fusion Research
E/1-3	Zhang, J.	China	25	Magnetic Fusion Power Development for Global Warming Suppression
E/1-4	Mima, K.	Japan	25	Inertial Fusion Power Development Path for Global Warming Suppression

Thursday, 16 October 2008

MORNING SESSIONS

**8:45–10:30 Session TH/3: Edge and Wave Particle Theory
Chair: Guenter, S. (Germany)**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
TH/3-1	Poli, E.	Germany	20	Behaviour of Turbulent Transport in the Vicinity of a Magnetic Island
TH/3-2	Hudson, S.R.	USA	20	Temperature Gradients are Supported by Cantori in Chaotic Fields.
TH/3-3	Shimizu, K.	Japan	20	Kinetic Modelling of Impurity Transport in Detached Plasma for Integrated Divertor Simulation with SONIC (SOLDOR/NEUT2D/IMPIC/EDDY)
TH/3-4	Spong, D.A.	USA	20	Energetic Particle Physics Issues for 3-d Toroidal Configurations
TH/3-5	Vdovin, V.L.	Russian Federation	20	Critical Problems in Plasma Heating/CD in Large Fusion Devices and ITER

**11:00–12:45 Session IF/1 & SE/1 & FT/2 : Inertial Fusion, Safety-Economics and Fusion Technology – II
Chair: Atzeni, S. (Italy)**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
IF/1-1	McCroly, R.L.	USA	20	Progress in Direct Drive Inertial Confinement Fusion
IF/1-2	Shiraga, H.	Japan	20	Implosion and Heating Experiments of Fast Ignition Targets for FIREX-1 Project
IF/1-3	Fernandez, J.C.	USA	20	Progress on the Development of Ion Based Fast Ignition
SE/1-1	Ward, D.J.	United Kingdom	20	Economic Consequences of Fusion Materials Development
FT/2-1	Yoshida, N.Y.	Japan	20	Reflectivity Reduction of Retro-reflector Installed in LHD due to Plasma Surface Interaction

Thursday, 16 October 2008

MORNING POSTER SESSIONS

08:45–12:45 Poster Session P6: ELMs, Pedestal, ITER, Experiments-Heating & CD

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/P6-1	Herrmann, A.	Germany	Filament Dynamics and Transport in the Scrape-Off-Layer of ASDEX Upgrade
EX/P6-2	Jakubowski, M.	Germany	Divertor Heat Loads in RMP ELM Controlled H-mode Plasmas on DIII-D
EX/P6-3	Kirk, A.	United Kingdom	ELM Power Loadings and Control on MAST Using Resonant Magnetic Perturbations
EX/P6-4	Maingi, R.	USA	Comparison of Small ELM Characteristics and Regimes in Alcator C-Mod, MAST, and NSTX
EX/4-4Ra	Asakura, N.	Japan	Investigations of Impurity Seeding and Radiation Control for Long-pulse and High-density H-mode Plasmas in JT-60U
EX/4-4Rb	Rapp, J.	Germany	Integrated Scenario with Type-III ELMy H-mode Edge: Extrapolation to ITER
EX/4-5	Lang, P.T.	Germany	Investigating Pellet Physics for ELM Pacing and Particle Fuelling in ITER
EX/P6-5	Nakashima, Y.	Japan	Analysis of Pedestal Characteristics in JT-60U H-mode Plasmas Based on Monte-Carlo Neutral Transport Simulation
EX/P6-6	Ejiri, A.	Japan	Non-inductive Plasma Current Start-up by EC and RF Power in the TST-2 Spherical Tokamak
EX/P6-7	Nagata, M.	Japan	Experimental and Computational Studies of MHD Relaxation Generated by Coaxial Helicity Injection in the HIST Spherical Torus Plasmas
EX/P6-8	Tanaka, K.	Japan	Non-Solenoidal Formation of Spherical Torus by ECH/ECCD in LATE
EX/P6-9	Yoshinaga, T.	Japan	Physics Study of EC-Excited Current Generation via Current Jump in CPD
EX/P6-10	Raman, R.	USA	Solenoid-free Plasma Start-up in NSTX Using Transient CHI
EX/P6-11	Sontag, A.C.	USA	Current Profile Modification Influence on MHD and Non-Solenoidal Plasma Startup in the Pegasus Toroidal Experiment
EX/P6-12	Bucalossi, J.	France	Electron Cyclotron Resonance Heating Assisted Plasma Startup in the Tore Supra tokamak

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/P6-13	Igami, H.	Japan	Electron Bernstein Wave Heating via the Slow X-B Mode Conversion Process with Direct Launching from the High Field Side in LHD
EX/P6-14	Kubo, S.	Japan	Profile Control by Local ECRH in LHD
EX/P6-15	Nagasaki, K.	Japan	Effect of Magnetic Field Ripple on ECCD in Heliotron J
EX/P6-16	Paley, J.I.	Switzerland	Real Time Control of Plasmas and ECRH Systems on TCV
EX/P6-17	Diem, S.J.	USA	Investigation of Electron Bernstein Wave (EBW) Coupling and its Critical Dependence on EBW Collisional Loss in High-Beta, H-Mode ST Plasmas
EX/P6-18	Laqua, H.	Germany	Fundamental Investigation of Electron Bernstein Wave Heating and Current Drive at the WEGA Stellarator
EX/P6-19	Goetz, J.A.	USA	Lower Hybrid and Electron Bernstein Wave Current Drive Experiments in MST
EX/P6-20	Nakamura, Y.	Japan	Time Evolution of the Bootstrap Current Profile in LHD Plasmas
EX/P6-21	Wilson, J.R.	USA	Lower Hybrid Heating and Current Drive on the Alcator C-Mod Tokamak
EX/P6-22	Goniche, M.	France	Effect of Gas Injection during LHCD Experiments in ITER-Relevant Coupling Conditions
EX/P6-23	Wukitch, S.J.	USA	Ion Cyclotron Antenna Impurity Production and Real Time Matching in Alcator C-Mod
EX/P6-24	Pinsker, R.I.	USA	Experimental Study of Fast Wave Absorption Mechanisms in DIII-D in the Presence of Energetic Ions
EX/P6-25	Phillips, C.K.	USA	Spectral Effects on Fast Wave Core Heating and Current Drive
EX/P6-26	Turnyanskiy, M.	United Kingdom	Current Profile Control Studies on MAST
EX/P6-27	Takase, Y.	Japan	Parametric Decay Instability during High Harmonic Fast Wave Heating Experiments on the TST-2 Spherical Tokamak
EX/P6-28	Okada, H.	Japan	Velocity Distribution of Fast Ions Generated by ICRF Heating in Heliotron J
EX/P6-29	Kumazawa, R.	Japan	Progress towards RF Heated Steady-State Plasma Operations on LHD by Employing ICRF Heating Methods and Improved Divertor Plates
EX/P6-30	Kasahara, H.	Japan	High Harmonic Fast Wave Heating and Beam Driven Ion Cyclotron Emission Behavior in the LHD
EX/P6-31	Bobkov, V.	Germany	ICRF Antenna Operation with Full W-wall in ASDEX Upgrade
EX/P6-32	Gunn, J.P.	France	Suprathermal Electron Beams and Large Sheath Potentials Generated by RF-antennae in the Scrape-off Layer of Tore Supra

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/P6-33	Ongena, J.	Belgium	Heating Optimization Studies at JET in Support of ITER
EX/4-1	Evans, T.E.	USA	Plasma Performance in DIII-D ELM-Suppressed RMP H-modes with ITER Similar Shapes
EX/4-2	Liang, Y.	Germany	Active Control of Type-I Edge Localized Modes with $n = 1$ and $n = 2$ fields on
EX/4-3Ra	Fundamenski, W.	United Kingdom	ELM filament Heat Loads on Plasma Facing Components in JET and ITER
EX/4-3Rb	Eich, T.	Germany	Divertor Heat Loads Due to Edge Localized Modes in ASDEX Upgrade and JET
IT/1-1	Alejaldre, C.	ITER	ITER on the Way to Become the First Fusion Nuclear Installation
IT/1-2	Hawryluk, R.J.	USA	Principle Physics Developments Evaluated in the ITER Design Review
IT/1-3	Weng, P.	ITER	Results of ITER Superconducting Magnet R&D
IT/1-4	Lowry, C.G.	ITER	Progress in Design and R&D on ITER Plasma Facing Components
IT/1-5	Thomas, P.R.	European Commission	ELM physics and ELM Mitigation in ITER
IT/P6-1	Izquierdo, J.	European Commission	European ITER Site Studies: Lessons Learnt in Safety and Licensing
IT/P6-2	Kurki-suonio, T.	Finland	Fast Ion Losses in ITER
IT/P6-3	Kramer, G.J.	USA	Fusion-born Alpha Particle Ripple Loss Studies in ITER
IT/P6-4	Giruzzi, G.	France	Integrated Modelling of Steady-state Scenarios for ITER: Physics and Computational Challenges
IT/P6-5	Oikawa, T.	ITER	Benchmarking of Neutral Beam Current Drive Codes as a Basis for the Integrated modelling for ITER
IT/P6-6	Polevoi, A.R.	ITER	Assessment of Plasma Parameters for Low Activation Phase of ITER Operation
IT/P6-7	Parail, V.	United Kingdom	Integrated Modelling for ITER in EU
IT/P6-8	Buttery, R.J.	United Kingdom	Multimachine Extrapolation of Neoclassical Tearing Mode Physics to ITER
IT/P6-9	La Haye, R.J.	USA	Prospects for Stabilization of Neoclassical Tearing Modes by Electron Cyclotron Current Drive in ITER
IT/P6-10	Bazylev, B.	Germany	Simulations of Material Damage to Divertor and First Wall Armour under ITER Transient Loads by Modelling and Experiments
IT/P6-11	Landman, I.S.	Germany	Integrated Modelling of ITER Plasma Dynamics and Wall Processes Following Type I ELMs and Consequences for Tokamak Operation

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
IT/P6-12	Tereshin, V.I.	Ukraine	Simulation of ITER Transient Heat Loads to the Divertor Surfaces with Using the High Power Quasi-Steady-State Plasma Accelerator
IT/P6-13	Loarte, A.	ITER	Power and Particle Fluxes at the Plasma Edge of ITER : Specifications and Physics Basis
IT/P6-14	Snyder, P.B.	USA	Pedestal Stability Comparison and ITER Pedestal Prediction
IT/P6-15	Kukushkin, A.S.	ITER	Analysis of Performance of the Optimized Divertor in ITER
IT/P6-16	Roth, J.	Germany	A New Look at the Specification of ITER Plasma Wall Interaction and Tritium Retention
IT/P6-17	Bandyopadhyay, I	India	Simulations of ITER Disruption and VDE Scenarios with TSC and Comparison with DINA Results
IT/P6-18	Whyte, D.G	USA	Studies of Requirements for ITER Disruption Mitigation Systems
IT/P6-19	Baylor, L. R.	USA	Pellet Fuelling, ELM Pacing, and Disruption Mitigation Technology Development for ITER
IT/P6-20	Donné, A.J.H.	Netherlands	Key R&D Activities for ITER Diagnostics
IT/P6-21	Costley, A.E.	ITER	Measurement Requirements and the Diagnostic System on ITER: Modifications Following the Design Review
IT/P6-22	Litnovsky, A.	Germany	Progress in Research and Development of Mirrors for ITER Diagnostics
IT/P6-23	Ogawa, H.	Japan	Research and Development of Optical Diagnostics for ITER
IT/P6-24	Mukhin, E.E.	Russian Federation	Progress in Development of Deposition Prevention and Cleaning Techniques for In-Vessel Optics in ITER
IT/P6-25	Walsh, M.J.	United Kingdom	Performance Evaluation of ITER Thomson Scattering Systems
IT/P6-26	Skinner, C.H.	USA	Electrostatic Dust Detection and Removal for ITER
TH/2-1Ra	Becoulet, M.	France	Physics of Penetration of Resonant Magnetic Perturbations Used for Type I Edge Localized Modes Suppression in Tokamaks.
TH/2-1Rb	Strauss, H.R.	USA	MHD Simulation of Resonant Magnetic Perturbations and ELMs

Thursday, 16 October 2008

AFTERNOON SESSIONS

14:10–16:15 Session EX/5 & TH/4: Stability
Chair: Bindslev, H. (Denmark)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
EX/5-1	Sabbagh, S.A.	USA	20	Advances in Global MHD Mode Stabilization Research on NSTX
EX/5-2	Matsunaga, G.	Japan	20	Dynamics and Stability of Resistive Wall Mode in the JT-60U High- β Plasmas
EX/5-3Ra	Reimerdes, H.	USA	20	Effect of Resonant and Non-resonant Magnetic Braking on Error Field Tolerance in High- β Plasmas
EX/5-3Rb	Park, J.K.	USA		New Understanding of Tokamak Plasma Response to 3D Magnetic Fields
TH/4-1	Chapman, I.T.	United Kingdom	20	The Physics of Sawtooth Stabilisation in Tokamak Plasmas
EX/5-4	Isayama, A.	Japan	20	Neoclassical Tearing Mode Control with ECCD and Magnetic Island Evolution in JT-60U
TH/4-2	Sen, A.	India	20	Turbulent Transport and Flow Effects on NTM Evolution and Trigger Mechanisms

16:45–18:30 Session EX/6 TH/5: Energetic Particle and Alfvén Eigen-modes
Chair: Van Dam, J.W. (USA)

EX/6-1	Garcia-Munoz, M.	Germany	20	MHD Induced Fast-Ion Losses on ASDEX Upgrade
EX/6-2	Van Zeeland, M.A.	USA	20	Alfvénic Instabilities and Fast Ion Transport in the DIII-D Tokamak
TH/5-1	Vlad, G.	Italy	20	Particle Simulation of Energetic Particle Driven Alfvén Modes
EX/6-3	Fredrickson, E.D.	USA	20	Toroidal Alfvén Eigen-mode Avalanches
TH/5-2	Gorelenkov, N.N.	USA	20	Theory and Observations of Low Frequency Eigen-modes due to Alfvén Acoustic Coupling in Toroidal Fusion Plasma

Thursday, 16 October 2008

AFTERNOON POSTER SESSIONS

14:00–18:45 Poster Session P7: Inertial Fusion, ITER

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
IF/1-1	McCrory, R. L.	USA	Progress in Direct Drive Inertial Confinement Fusion
IF/1-2	Shiraga, H.	Japan	Implosion and Heating Experiments of Fast Ignition Targets for FIREX-1 Project
IF/1-3	Fernandez, J.C.	USA	Progress on the Development of Ion Based Fast Ignition
IF/P7-2	Tolley, M.K.	United Kingdom	Microtarget Requirements, Production and Delivery for HiPER
IF/P7-3	Atzeni, S.	Italy	Studies on Targets for Inertial Fusion Ignition Demonstration at the HiPER Facility
IF/P7-4	Batani, D.	Italy	Fast Electron Propagation In High Density Plasmas Created By Shock Wave Compression
IF/P7-5	Chen, M.	Japan	Theory and Simulation of Non-local Thermal Smoothing for Arbitrary Scale Length Modulation
IF/P7-6	Goto, T.	Japan	Conceptual Design of a Fast-Ignition Laser Fusion Reactor FALCON-D
IF/P7-7	Hora, H.	Australia	Modification of the Bobin-Chu Fusion Threshold for Laser Driven Block Ignition or for Spark Ignition
IF/P7-8	Kawanaka, J.K.	Japan	"GENBU"-Laser Development with Cryogenic Yb:YAG Ceramic for Fusion Energy Reactor Driver
IF/P7-9	Khaydarov, R.	Uzbekistan	Methods Improved Characteristics of Laser Source of Ions
IF/P7-10	Koester, P.	Italy	Fast Electron Transport Studies in Petawatt Laser Irradiation of Solid Dielectric and Metallic Target Materials
IF/P7-11	Kong, H. J.	Korea, Rep. of	Beam Combined Laser Fusion Driver Using Stimulated Brillouin Scattering Phase Conjugation Mirrors
IF/P7-12	Koresheva, E.R.	Russian Federation	Study on Fabrication and Manipulation of HEDgeHOB Cryogenic Targets
IF/P7-13	Labate, L.	Italy	Study of Fast Electron Transport Dynamics in Solids Using Multispectral, Monochromatic X-ray Imaging
IF/P7-14	Li, D.	China	Effects of Magnetic Field, Viscosity and Shear Flow on the Richtmyer-Meshkov Instability
IF/P7-15	Logan, B.G.	USA	Advances in U.S. Heavy Ion Fusion Science
IF/P7-16	Murakami, M.M.	Japan	Quest for Impact Fast Ignition

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
IF/P7-17	Nagai, K.	Japan	Encapsulation of Low Density Plastic Foam Materials for the Fast Ignition Realization Experiment (FIREX) - Control of Microstructure and Density -
IF/P7-18	Nagatomo, H.	Japan	Numerical Study of Advanced Target Design for FIREX-I
IF/P7-19	Norimatsu, T.	Japan	Elemental Research on Laser Fusion Reactor KOYO-F
IF/P7-20	Perlado, J.M.P.	Spain	Chamber Responses and Safety and Fusion Technology in HIPER Facility
IF/P7-21	Perlado, J.M.P.	Spain	Progress in Inertial Fusion and Fusion Technology at DENIM
IF/P7-22	Sakagami, H.	Japan	Integrated Simulations and Respective Simulation Modelling for FIREX-I
IF/P7-23	Sid, A.	Algeria	Weibel Instability in a Bi-Maxwellian Laser Fusion Plasma
IF/P7-24	Tanaka, K.A.	Japan	Progress in Studies of Ultra-intense Laser Plasma Interactions for Fast Ignition FIREX Project
IF/P7-25	Wolowski, J.	Poland	Studies of Phenomena Related to Fast Ignition of a Fusion Target
IF/P7-26	Yoshida, H.	Japan	Development of Target Injection and Tracking for IFE in Japan
IF/P7-27	Pavez, C.	Chile	Experimental Studies in Mega Ampere Gas Embedded Z-pinch with Different Initial Conditions of Preionization
IF/P7-28	Shumlak, U.	USA	Sheared Flow Stabilization in the Z-Pinch
IF/P7-29	Rudraiah, N.	India	Electromagneto-hydrodynamic Rayleigh-Taylor Instability at the Ablative Surface of IFE Target Filled with a Poorly Conducting Fluid Layer Bounded Above by a Poro
IF/P7-30	Lei, Y.A.	China	Fast Ignition Impact Fusion
IF/P7-31	Van Woerkom, L.D.	USA	Progress in Fast Ignition Studies with Electrons and Protons
IF/P7-32	Matzen, M.K.	USA	Progress in Pulsed Power Driven Inertial Confinement Fusion at Sandia National Laboratories
IT/2-1	Sakamoto, K.	Japan	Progress in ITER Heating and Current Drive System
IT/2-2	Sips, A.C.C.	Germany	Experimental Studies of ITER Demonstration Discharges
IT/2-3	Kessel, C.E.	USA	Development of ITER 15 MA ELMy H-mode Inductive Scenario
IT/2-4Ra	Portone, A.	European Commission	ITER Plasma Vertical Stabilization
IT/2-4Rb	Humphreys, D.A.	USA	Experimental Vertical Stability Studies for ITER Performance and Design Guidance
IT/P7-1	Becoulet, A.J.	France	A Lower Hybrid Current Drive System for ITER
IT/P7-2	Jackson, G.L.	USA	Simulating the ITER Plasma Startup Scenario in the DIII-D Tokamak

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
IT/P7-3	Dremel, M.	Germany	Cryopump Design for the ITER Heating Neutral Beam Injector
IT/P7-4	Kashiwagi, M.	Japan	High Energy, High Current Accelerator Development for ITER NBI at JADA
IT/P7-5	Watanabe, K.	Japan	-1 MV DC UHV Power Supply for ITER NBI
IT/P7-6	Nightingale, M.P.S.	United Kingdom	RF and Mechanical Design of the ITER Ion Cyclotron Resonance Frequency Antenna
IT/P7-7	Hemsworth, R.S.	ITER	Status of the ITER Heating Neutral Beam System
IT/P7-8	Messiaen, A.M.A.	Belgium	Preparing ITER ICRF: Test of the Load Resilient Matching Systems on an Antenna Mock-up
IT/P7-9	Fantz, U.	Germany	Physical Performance Analysis of the Negative Ion RF Source for the ITER NBI System
IT/P7-10	Chen, J.	China	ITER First Wall Fabrication Technology in China
IT/P7-11	Nishi, H.	Japan	Study on Characteristics of Dissimilar Material Joints for ITER First Wall
IT/P7-12	Bong Guen, B.G.H.	Korea, Rep. of	Progress on the Development of the Fabrication Technology for the ITER First Wall in Korea
IT/P7-13	Bruzzone, P.	Switzerland	Qualification Tests and Facilities for the ITER Superconductors
IT/P7-14	Zanino, R.	Italy	EU Contribution to the Test and Analysis of the ITER Poloidal Field
IT/P7-15	Li, W.	China	Recent Progress of GIS/GDC Design and Manufacturing for ITER
IT/P7-16	Day, C.	Germany	Implications of Increased Gas Throughputs at ITER on the Torus Exhaust Pumping System
IT/P7-17	Ezato, K.	Japan	Provisional Procurement Activity and R&D's on Divertor HHF Components in JADA
IT/P7-18	Kakudate, S.	Japan	R&D Activities for ITER Blanket Remote Handling equipment
IT/P7-19	Siuko, M.	Finland	DTP2 - Verifying the Divertor Remote Handling Equipment for ITER
IT/P7-20	Park, H.K	Korea, Rep. of	Progress on the Design of the ITER Tokamak Assembly Tools
IT/P7-21	Chung, W.	Korea, Rep. of	Design Progress and Analysis for ITER Thermal Shield
IT/P7-22	Cho, S.	Korea, Rep. of	Status of R&D Activities on the ITER Tritium Storage and Delivery System

Friday, 17 October 2008

MORNING SESSIONS

**8:45–10:30 Session EX/7 & PD/1: High- β Disruption,
Post-deadline
Chair: Kruglyakov, E.P. (Russian Federation)**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
EX/7-1Ra	Chapman, B.E.	USA	20	High- β Plasmas Exceeding Dual Stability Thresholds in the MST RFP
EX/7-1Rb	Masamune, S.	Japan		Effects of Lowering the Aspect Ratio on MHD Behaviour in a Reversed Field Pinch
EX/7-2Ra	Arnoux, G.	United Kingdom	20	Heat Load on Plasma Facing Components during Disruptions on JET
EX/7-2Rb	Riccardo, V.	United Kingdom		Progress in Understanding Halo Current at JET
EX/7-2Rc	Okamoto, M.	Japan		Study of Current Decay Time during Disruption in JT-60U Tokamak
EX/7-3Ra	Esposito, B.	Italy	20	Disruption Control on FTU with ECRH
EX/7-3Rb	Wesley, J.C.	USA		Fast Plasma Shutdowns Obtained with Massive Hydrogenic, Noble and Mixed-Gas Injection in DIII-D
EX/7-3Rc	Savrukhin, P.V.	Russian Federation		Effect of the MHD Perturbations on Runaway Beam Formation During Disruptions in the T-10 Tokamak
PD/1-1			20	
PD/1-2			20	

Friday, 17 October 2008

MORNING SESSIONS (continuation)

**11:00–12:45 Session IT/2 & FT/3: ITER-II,
Fusion Technology III
Chair: Li, Jiangan (China)**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
IT/2-1	Sakamoto, K.	Japan	20	Progress in ITER Heating and Current Drive System
IT/2-2	Sips, A.C.C.	Germany	20	Experimental Studies of ITER Demonstration Discharges
IT/2-3	Kessel, C.E.	USA	20	Development of ITER 15 MA ELMy H-mode Inductive Scenario
IT/2-4Ra	Portone, A.	European Commission	20	ITER Plasma Vertical Stabilization
IT/2-4Rb	Humphreys, D.A.	USA		Experimental Vertical Stability Studies for ITER Performance and Design Guidance
FT/3-1Ra	Kasugai, A.	Japan	20	Demonstration of 1 MW Quasi-CW Operation of 170 GHz Gyrotron and Progress of EC Technology for ITER
FT/3-1Rb	Litvak, A.	Russian Federation		Status of the Development in Russia of a Megawatt Power Gyrotrons for Fusion
FT/3-1Rc	Rzesnicki, T.	Germany		Experimental Investigations on the Pre-Prototype of the 170 GHz, 2 MW Coaxial Cavity Gyrotron for ITER

Friday, 17 October 2008

MORNING POSTER SESSIONS

**08:45–12:45 Poster Session P8: Energetic Particles,
Alfvén Eigen-modes, Theory-Confinement**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/P8-1	Fujisawa, A.	Japan	Oscillatory Zonal Flows Driven by Interaction between Energetic Ions and Fishbone-like Instability in CHS
EX/P8-2	Ichimura, M.	Japan	Study of Ion Cyclotron Emissions due to DD Fusion Product Ions on JT-60U
EX/P8-3	Murakami, S.	Japan	Radial Profile and Confinement of Energetic Particles during NBI and ICRF Heating in LHD
EX/P8-4	Toi, K.	Japan	Alfvén Eigenmodes and Geodesic Acoustic Modes Driven by Energetic Ions in an LHD Plasma with Non-monotonic Rotational Transform Profile
EX/P8-5	Nishiura, M.	Japan	Fast-ion Transport during Repetitive Burst Phenomena of Toroidal Alfvén Eigenmodes in the Large Helical Device
EX/P8-6	Snipes, J.A.	USA	Characterization of Stable and Unstable Alfvén Eigenmodes in Alcator C-Mod
EX/P8-7	Pinches, S.D.	United Kingdom	Fast Particle Instabilities in MAST
EX/P8-8	Kiptily, V.	United Kingdom	Recent Progress in Fast-Ion Physics on JET
EX/P8-9	Sabot, R.	France	Observation of Fast Particles Modes in Tore-Supra
EX/P8-10	Gao, Q.D.	China	TF Ripple Induced Stochastic Diffusion of Energetic Particles in Advanced Tokamak Configurations on HL-2A
EX/P8-11	Chen, W.	China	Destabilization of the Internal Kink Mode by Energetic Electrons on the HL-2A Tokamak
EX/P8-12	Cesario, R.	Italy	Search for Fishbone-like Internal Kink Instabilities Driven by Supra-thermal Electrons in FTU
EX/6-1	Garcia-Munoz, M.	Germany	MHD Induced Fast-Ion Losses on ASDEX Upgrade
EX/6-2	Van Zeeland, M.A.	USA	Alfvénic Instabilities and Fast Ion Transport in the DIII-D Tokamak
EX/6-3	Fredrickson, E.D.	USA	Toroidal Alfvén Eigenmode Avalanches
TH/5-1	Vlad, G.	Italy	Particle Simulation of Energetic Particle Driven Alfvén Modes
TH/5-2	Gorelenkov, N.N.	USA	Theory and Observations of Low Frequency Eigenmodes Due to Alfvén Acoustic Coupling in Toroidal Fusion Plasma
TH/P8-1	Xu, G.S.	China	Cross-field Transport Driven by Turbulent Scattering of Particles in Tokamaks

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
TH/P8-2	Onjun, T.	Thailand	ITER Simulations with Internal and Edge Transport Barriers
TH/P8-3	Ludwig, G.O.	Brazil	Performance Analysis of Compact Tokamak Reactors
TH/P8-4	Gao, Z.	China	Plasma Shaping Effects on Temperature Gradient-Driven Instabilities and Geodesic Acoustic Modes
TH/P8-5	Wang, A.	China	A Possible Model for Non-Local Electron Heat Transport
TH/P8-6	Heikkinen, J.A.	Finland	Full-f Gyrokinetic Simulation of Tokamak Plasma Turbulence Using ELMFIRE
TH/P8-46	Sarazin, Y.	France	Global Gyrokinetic Simulations of ρ^* and ν^* Scalings of Turbulent Transport
TH/P8-7	Bourdelle, C.	France	Validity of Quasi-Linear Transport Model
TH/P8-8	Eriksson, L.G.	France	Influence of RF Fields on Anomalous Impurity Transport in Tokamaks
TH/P8-9	Fuhr, G.	France	Electromagnetic Self-Organization and Transport Barrier Relaxations in Fusion Plasmas
TH/P8-10	Beidler, C.D.	Germany	Results From the International Collaboration on Neoclassical Transport in Stellarators (ICNTS)
TH/P8-11	Hallatschek, K.	Germany	Diamagnetic GAM Drive Mechanism
TH/P8-12	Jenko, F.	Germany	Multi-Scale, Multi-Mode Gyrokinetic Simulations and Implications for Transport Modelling of Tokamaks and Optimized Stellarators
TH/P8-13	Scott, B.D.	Germany	Global Electromagnetic Gyrofluid/Gyrokinetic Computation of Turbulence and Self Consistent Rotation in Large Tokamaks
TH/P8-14	Singh, R.	India	Nonlinear Excitation of Zonal Flow and Geodesic Acoustic Modes in the Edge of Tokamak Plasma
TH/P8-15	Honda, M.	Japan	Self-consistent Simulation of Torque Generation by Radial Current due to Fast Particles
TH/P8-16	Ishizawa, A.	Japan	Transport due to Electromagnetic Turbulence in Externally Heated Plasma
TH/P8-17	Kishimoto, Y.	Japan	Multi-scale Transport Dynamics Dominated by Multiple Dissipation Mechanisms near the Critical Gradient
TH/P8-18	Li, J.Q.	Japan	New Characteristics of Zonal Flows in Multi-scale Plasma Turbulence
TH/P8-19	Tokunaga, S.	Japan	Multi-scale Transport Simulation of Internal Transport Barrier Formation and Collapse
TH/P8-20	Watanabe, T.H.	Japan	Regulation of Turbulent Transport in Neoclassically Optimized Helical Configurations with Radial Electric Fields
TH/P8-21	Na, Y.S.	Korea, Rep. of	Transport Simulations of KSTAR Advanced Tokamak Scenarios
TH/P8-22	Vlad, M.	Romania	Nonlinear Dynamics of Impurities in Turbulent Tokamak Plasmas

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
TH/P8-23	Dnestrovskij, A.Y.	Russian Federation	Canonical Profile Transport Model for H-mode Shots in Tokamaks
TH/P8-24	Dnestrovskij, Y.N.	Russian Federation	Approach to Canonical Pressure Profiles in Stellarators
TH/P8-25	Leonov, V.M.	Russian Federation	Modelling of Tokamak Discharges with the Fast Central Response to the Boundary Plasma Perturbations
TH/P8-26	Pastukhov, V.P.	Russian Federation	Reduction of Cross-Field Plasma Transport in Tokamaks due to Power Input Redistribution and Sheared Flow Profile Modification
TH/P8-27	Fülöp, T.	Sweden	Quasilinear Transport Fluxes Driven by Microinstabilities in Tokamaks
TH/P8-28	Nordman, H.	Sweden	Transport in ITER-like Plasmas in Neoclassical, Fluid and Gyrokinetic Descriptions
TH/P8-29	Weiland, J.	Sweden	Symmetry breaking effects of toroidicity on toroidal momentum transport
TH/P8-30	Jolliet, S.	Switzerland	Global Nonlinear Simulations of Ion and Electron Turbulence Using a Particle-In-Cell Approach
TH/P8-31	Suwanna, S.	Thailand	Pedestal Temperature Models with Self-Consistent Calculation of Safety Factor and Magnetic Shear
TH/P8-32	Anderson, J.	United Kingdom	Non-perturbative Models of Intermittency in ITG Drift Wave Turbulence with Zonal Flows
TH/P8-33	Peeters, A.G.	United Kingdom	Gyro-Kinetic Study of Toroidal Momentum Transport
TH/P8-34	Aydemir, A.Y.	USA	An Angular Momentum Source in Tokamaks
TH/P8-35	Bateman, G.	USA	Integrated Modelling Simulations of Toroidal Momentum Transport in Tokamaks
TH/P8-36	Callen, J.D.	USA	Toroidal Rotation in Tokamak Plasmas
TH/P8-37	Catto, P.J.	USA	Limitations, Insights and Improvements to Gyrokinetics
TH/P8-38	Del-Castillo-Negrete, D.	USA	Non-local Models of Perturbative Transport: Numerical Results and Application to JET Experiments
TH/P8-39	Ernst, D.R.	USA	Role of Zonal Flows in TEM Turbulence through Nonlinear Gyrokinetic Particle and Continuum Simulation
TH/P8-40	Ku, S.	USA	Core and Edge full-f ITG turbulence with Self-consistent Neoclassical and Mean Flow Dynamics Using a Real Geometry Particle Code XGC1
TH/P8-41	Lin, Z.	USA	Gyrokinetic Turbulence Simulation of Physics Basis for Transport Modelling
TH/P8-42	Staebler, G.M.	USA	Testing the Trappes Gyro-Landau Fluid Transport Model With Data From Tokamaks and Spherical Tori

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
TH/P8-43	Terry, P.W.	USA	Role of Impurity Cyclotron Damping in Ion Heating and RFP Turbulence
TH/P8-44	Wang, W. X.	USA	Interaction between Turbulence and Neoclassical Dynamics and Its Effect on Tokamak Transport: Gyrokinetic Simulations and Theory
TH/P8-45	Picha, R.	Thailand	Study of ITER Performance Based on Different Plasma Geometry

Friday, 17 October 2008

AFTERNOON SESSIONS

14:10–16:15 Session EX/8 & TH/6: Transport Barriers
Chair: Synakowski, E. (USA)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
EX/8-1Ra	Sakamoto, R.	Japan	20	High Density High Performance Plasma with Internal Diffusion Barrier in Large Helical Device
EX/8-1Rb	Ohdachi, S.	Japan		Two Approaches to the Reactor-relevant High- β Plasmas with Profile Control in the Large Helical Device
TH/6-1	Toda, S.	Japan	20	Theoretical Modelling of Transport Barriers in Helical Plasmas
EX/8-2Ra	Nagaoka, K.	Japan	20	Characteristics of High-Ion-Temperature Plasmas Heated by Neutral Beams in the Large Helical Device
EX/8-2Rb	Ida, K.	Japan		Dynamics of Ion Internal Transport Barrier in LHD Heliotron and JT-60U Tokamak Plasmas
EX/8-3	De Vries, P.C.	United Kingdom	20	Internal Transport Barrier Dynamics with Plasma Rotation in JET
EX/8-4	Burrell, K.H.	USA	20	Edge Pedestal Control in Quiescent H-Mode Discharges in DIII-D Using Co Plus Counter Neutral Beam Injection
EX/8-5	Urano, H.	Japan	20	Heat Transport and Pedestal Structure of H-mode in the Variation of Current Density Profiles in JT-60U

Friday, 17 October 2008

AFTERNOON SESSIONS (continuation)

**16:45–18:30 Session EX/9 & TH/7: Plasma Wall Interaction
Chair: Chatelier, M. (France)**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
EX/9-1	Tsitrone, E.	France	20	Deuterium Inventory in Tore Supra : Reconciling Particle Balance and Post Mortem Analysis
EX/9-2	Kallenbach, A.	Germany	20	Non-Boronized Operation of ASDEX Upgrade with Full-Tungsten Plasma Facing Components
EX/9-3	Rudakov, D.L.	USA	20	Dust Studies in DIII-D and TEXTOR
TH/7-1	Ito, A.I.	Japan	20	Molecular Dynamics Simulation of Chemical Sputtering of Hydrogen Atom on Layer Structured Graphite
EX/9-4	Kobayashi, M.	Japan	20	Study on Impurity Screening in Edge Ergodic Layer of Large Helical Device

Friday, 17 October 2008

AFTERNOON POSTER SESSIONS

14:10–18:30 Poster Session P9, PD: High-Beta, Stability,
Post-Deadline, Theory-Stability

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
PD/1-1			
PD/1-2			
PD/P1-1			
PD/P1-2			
PD/P1-3			
PD/P1-4			
PD/P1-5			
PD/P1-6			
PD/P1-7			
PD/P1-8			
PD/P1-9			
PD/P1-10			
EX/5-1	Sabbagh, S. A.	USA	Advances in Global MHD Mode Stabilization Research on NSTX
EX/5-2	Matsunaga, G.	Japan	Dynamics and Stability of Resistive Wall Mode in the JT-60U High- β Plasmas
EX/5-3Ra	Reimerdes, H.	USA	Effect of Resonant and Non-resonant Magnetic Braking on Error Field Tolerance in High- β Plasmas
EX/5-3Rb	Park, J.K.	Japan	New Understanding of Tokamak Plasma Response to 3D Magnetic Fields
EX/5-4	Isayama, A.	USA	Neoclassical Tearing Mode Control with ECCD and Magnetic Island Evolution in JT-60U
EX/7-1Ra	Chapman, B.E.	USA	High- β Plasmas Exceeding Dual Stability Thresholds in the MST RFP
EX/7-1Rb	Masamune, S.	Japan	Effects of Lowering the Aspect Ratio on MHD Behaviour in a Reversed Field Pinch
EX/7-2Ra	Arnoux, G.	United Kingdom	Heat Load on Plasma Facing Components during Disruptions on JET
EX/7-2Rb	Riccardo, V.	United Kingdom	Progress in Understanding Halo Current at JET

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
EX/7-2Rc	Okamoto, M.	Japan	Study of Current Decay Time during Disruption in JT-60U Tokamak
EX/7-3Ra	Esposito, B.	Italy	Disruption Control on FTU with ECRH
EX/7-3Rb	Wesley, J.C.	USA	Fast Plasma Shutdowns Obtained With Massive Hydrogenic, Noble and Mixed-Gas Injection in DIII-D
EX/7-3Rc	Savrukhin, P.V.	Russian Federation	Effect of the MHD Perturbations on Runaway Beam Formation during Disruptions in the T-10 Tokamak
EX/P9-1	Pautasso, G.	Germany	Disruptions Mitigation in ASDEX Upgrade with the In-vessel Fast Valve.
EX/P9-2	Liu, Y.	China	Study on Stabilization of Tearing Mode with ECRH and its Resultant Transport Properties on HL-2A Tokamak
EX/P9-3	Xiao, C.	Canada	Investigations of Magnetohydrodynamic (MHD) Instabilities in the STOR-M Tokamak
EX/P9-4	Ono, Y.	Japan	Ion and Electron Heating Characteristics of Magnetic Reconnection in TS-3 and UTST Merging Startup Experiments
EX/P9-5	Okabayashi, M.	USA	Comprehensive Control of Resistive Wall Modes in DIII-D Advanced Tokamak Plasmas
EX/P9-6	Maurer, D.A.	USA	Control of External Kink Modes Near the Ideal Wall Limit Using Kalman Filtering and Optimal Control Techniques
EX/P9-7	Drake, J.R.	Sweden	Reversed-field Pinch Contributions to Resistive Wall Mode Physics and Control
EX/P9-8	Marrelli, L.	Italy	Active Control of Resistive Kink-Tearing Modes in RFX-mod
EX/P9-9	Maget, P.	France	MHD Modes Associated to Hollow Current Density Profile Configuration: Experiment and Modelling
EX/P9-10	Igochine, V.	Germany	The Role of Stochastization in Fast MHD Phenomena on ASDEX Upgrade
EX/P9-11	Blackwell, B.D.	Australia	Configurational Effects on Stability and Confinement in the H-1NF Helic
EX/P9-12	De Baar, M.R.	Netherlands	Overview of Tearing Mode Physics and Control Program at TEXTOR
TH/4-1	Chapman, I.T.	United Kingdom	The Physics of Sawtooth Stabilisation in Tokamak Plasmas
TH/4-2	Sen, A.	India	Turbulent Transport and Flow Effects on NTM Evolution and Trigger Mechanisms
TH/P9-1	Katsuro-Hopkins, O.	USA	Global MHD Stability Study of KSTAR high β Plasma Equilibria Under Passive and Active Mode Control
TH/P9-2	Mikhailov, M.I.	Russian Federation	Exploration of Configurational Space for Quasi-isodynamic Stellarators with Poloidally Closed Contours of the Magnetic Field Strength

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
TH/P9-3	Reiman, A.H.	USA	Passive Stabilization of the Vertical Mode in Tokamaks by Localized Nonaxisymmetric Fields
TH/P9-4	Hole, M.J.	Australia	A Generalized Relaxed MHD Model for 3D Equilibria with KAM Surfaces
TH/P9-5	Dong, J.	China	Fast Growth and Sheared Flow Generation in Nonlinear Development of Double Tearing Modes
TH/P9-6	Zhang, C.	China	Analysis of the Relaxed States for the Rotating Plasmas with no Momentum Input
TH/P9-7	Cahyna, P.	Czech Republic	Optimization of Magnetic Perturbation Spectra for the COMPASS Tokamak
TH/P9-8	Benkadda, S.	France	Nonlinear Dynamics of Magnetic Islands Imbedded in Small Scale Turbulence of Edge Tokamak Plasmas
TH/P9-9	Drevlak, M.A.	Germany	Computational Study of Magnetic Islands in the W7-X and NCSX Stellarators
TH/P9-10	Günter, S.	Germany	Three-dimensional Effects in Tokamaks - How Tokamaks Can Benefit from Stellarator Research
TH/P9-11	Botrugno, A.	Italy	Temperature-Gradient-Driven Tearing Modes in the Semicollisional Tokamak Regime
TH/P9-12	Aiba, N.	Japan	Effects of a Toroidal Rotation on the Stability Boundary of the MHD modes in the Tokamak Edge Pedestal
TH/P9-13	Furukawa, M.	Japan	Suppression of Error-Field-Induced Magnetic Islands by Alfvén Resonance Effect in Rotating Plasmas
TH/P9-14	Hayashi, N.	Japan	Integrated simulation of ELM Energy Loss and Cycle in Improved H-mode Plasmas
TH/P9-15	Ishii, Y.	Japan	Plasma Rotation Effects on the Trigger of Reversed Shear Plasma Disruptions
TH/P9-16	Miura, H.	Japan	MHD Simulation of High Wavenumber Ballooning-like Modes in LHD
TH/P9-17	Mizuguchi, N.	Japan	Nonlinear Dynamics of Collapse Phenomena in Heliotron Plasma with Large Pressure Gradient
TH/P9-18	Sato, M.	Japan	Study of MHD Stability β Limit in LHD by Hierarchy Integrated Simulation Code
TH/P9-19	Suzuki, Y.	Japan	Theoretical Studies of Equilibrium β Limit in Heliotron Plasmas
TH/P9-20	Tokuda, S.	Japan	A New Matching Scheme for Resistive Wall Mode Analysis
TH/P9-21	Yagi, M.	Japan	Multi-scale Interaction Among Neoclassical Tearing Mode and Drift Wave Turbulence

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Title of Paper</i>
TH/P9-22	Park, Y.S.	Korea, Rep. of	Stability Analysis of NTMs and Self-consistent Dynamic Simulation for the Control of Neoclassical Tearing Mode in KSTAR
TH/P9-23	Herrera-Velázquez, J.J.E.	Mexico	Magneto-hydrodynamic Equilibrium with Flow in Toroidal Plasmas and its Relevance to Internal Transport Barriers
TH/P9-24	Ilgisonis, V.I.	Russian Federation	Negative Energy Waves and Stability of Rotating Plasmas
TH/P9-25	Pustovitov, V.D.	Russian Federation	Rotating Wall, the Error-field-induced Torque and the Problem of the Error Field Shielding in Tokamaks
TH/P9-26	Liu, Y.Q.	United Kingdom	Modelling Resistive Wall Modes with Self-consistent Inclusion of Drift Kinetic Resonances
TH/P9-27	Wilson, H.R.	United Kingdom	The Interaction between Transport and Reconnection Processes
TH/P9-28	Gourdain, P.A.	USA	Hollow Current Profile Scenarios for Advanced ITER Operations
TH/P9-29	Jardin, S. C.	USA	Two-Fluid and Resistive Nonlinear Simulations of Tokamak Equilibrium, Stability, and Reconnection
TH/P9-30	Shaing, K.C.	USA	Critical Toroidal Rotation Profile for Resistive Wall Modes and Control of Magnetic Islands in Tokamaks
TH/P9-31	Waelbroeck, F.L	USA	Interaction of Turbulence and Magnetic Islands
TH/P9-32	Zheng, L.J.	USA	Gyrokinetic Theory for Kinetic Analysis of Resistive Wall Modes in ITER

Saturday, 18 October 2008

MORNING SESSIONS

08:45–10:30 Session EX/10 & TH/8: Turbulence
Chair: Lopes Cardozo, N.J. (Netherlands)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
EX/10-1	Mckee, G.R.	USA	20	Dependence of the L- to H-mode Power Threshold on Toroidal Rotation and the Link to Edge Turbulence Dynamics
EX/10-2Ra	Mazzucato, E.	USA	20	Turbulent Fluctuations with the Electro Gyro-scale in the National Spherical Torus Experiment
EX/10-2Rb	Gusakov, E.Z.	Russian Federation		Evolution of ETG-mode Scale Turbulence Spectra and Anomalous Electron Transport in Dynamic Experiments at FT-2 Tokamak
TH/8-1	Holland, C.G.	USA	20	Validation of Gyrokinetic Transport Simulations Using DIII-D Core Turbulence Measurements
TH/8-2	Idomura, Y.	Japan	20	Conservative Global Gyrokinetic Toroidal Full-f 5D Vlasov Simulation
TH/8-3	Angioni, C.	Germany	20	Gyrokinetic Simulations of Impurity, He Ash and Alpha Particle Transport and Consequences on ITER Transport Modelling

Saturday, 18 October 2008

MORNING SESSIONS (continuation)

10:45–12:30 Session FT/4: Fusion Technology - IV
Chair: Noda, N. (Japan)

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Title of Paper</i>
FT/4-1	Brooks, J.N.	USA	20	Plasma Surface Interaction Issues of an All-metal ITER
FT/4-2Ra	Philipps, Volker	Germany	20	Development of Wall Conditioning and Tritium Removal Techniques in TEXTOR for ITER and Future Fusion Devices
FT/4-2Rb	Wright, G.M.	Netherlands		Hydrogenic Retention of High-Z Refractory Metals Exposed to ITER Divertor Relevant Plasma Conditions
FT/4-3Ra	Jitsukawa, S.	Japan	20	Irradiation Effects on Reduced Activation Ferritic/Martensitic Steels - Mechanical Properties and modelling
FT/4-3Rb	Muroga, T.	Japan		Compatibility of Reduced Activation Ferritic/Martensitic Steels with Liquid Breeders
FT/4-4	Chernov, V.M.	Russian Federation	20	Structural Materials for Fusion Power Reactors - the RF R&D Activities in 2006-2008
FT/4-5Ra	Nightingale, M.P.S.	United Kingdom	20	Development of the JET Ion Cyclotron Resonance Frequency Heating System in Support of ITER
FT/4-5Rb	Vulliez, K.	France		Validation of the Load-Resilient Ion Cyclotron Resonance Frequency Antenna Concept on Tore Supra Plasmas

Saturday, 18 October 2008

AFTERNOON SESSIONS

**14:10–16:15 Fusion Prizes
Session S/1: Summary
Chair: Matsuda, S. (Japan)**

<i>No of Paper IAEA-CN-165</i>	<i>Name</i>	<i>Designating Member State/Organization</i>	<i>Time (min)</i>	<i>Topics</i>
Nuclear Fusion Prize		Host/IAEA	30	
S/1-1	Taylor, T.	USA	30	EX-C, IC
S/1-2	Motojima, O.	Japan	30	EX-S, W, D
S/1-3	Dnestrovski, Yu.	Russian Federation	30	TH

**16:45–18:00 SessionS/1, C: Summary (Cont), CLOSING
Chair: Kikuchi, M. (Japan)**

S/1-4	Stork, D.	United Kingdom	30	IT, FT, SE
S/1-5	Tanaka, K.A.	Japan	30	IF
CLOSING		IAEA	20	

Poster Sessions Overview

Day Date	Sunday 12 October 2008	Monday 13 October 2008	Tuesday 14 October 2008
08:45 - 10:30			P2 Fusion Technology, Safety Economics
Coffee Break			
11:00 - 12:45	IFRC		P2 Fusion Technology, Safety Economics
Lunch			
14:10 - 16:15	IFRC	P1 Overview (all)*	P3 Transport Barriers, Theory-Wall, Fusion Technology
Coffee Break			
16:45 - 18:30	IFRC & Registration of Conference Participants (16:00-19:30)	P1 Overview (all)*	P3 Transport Barriers, Theory-Wall, Fusion Technology
Break			
		Reception	

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

Wednesday 15 October 2008	Thursday 16 October 2008	Friday 17 October 2008
P4 SOL, Impurities, Experiments-Wall, Theory-Divertor, Innovative Confinement, Scenarios	P6 ELMs, Pedestal, ITER, Experiments- Heating&CD	P8 Energetic Particles, Alfvén Eigen-modes, Theory-Confinement
P4 SOL, Impurities, Experiments-Wall, Theory-Divertor, Innovative Confinement, Scenarios	P6 ELMs, Pedestal, ITER, Experiments- Heating&CD	P8 Energetic Particles, Alfvén Eigen-modes, Theory-Confinement
P5 Momentum Transport, Turbulence	P7 Inertial Fusion, ITER	P9, PD High-Beta, Stability, Post-Deadline, Theory-Stability
P5 Momentum Transport, Turbulence	P7 Inertial Fusion, ITER	P9, PD High-Beta, Stability, Post-Deadline, Theory-Stability
(20:00) Evening Session 50 years Anniversary	Banquet	(20:30) Evening Session at CERN

Posters Listing

P1 Monday PM	P2 Tuesday AM	P3 Tuesday PM	P4 Wednesday AM	P5 Wednesday PM
Overview	Fusion Technology, Safety-Economics	Transport Barriers, Theory-Wall, Fusion Technology	SOL, Impurities, Experiments-Wall, Theory-Divertor, Innovative Confinement, Scenarios	Momentum Transport, Turbulence
24	50	72	70	59
	24	24	24	24
24	74	96	94	83
OV1-1	FT/1-1	EX/1-1	EXP/4-1	EXP/5-1
OV1-2	FT/1-2	EX/1-2	EXP/4-2	EX/3-1
OV1-3	FT/1-3	EX/1-3	EXP/4-3	EX/3-2
OV1-4	FT/1-4	EX/1-4Ra	EXP/4-4	EX/3-3
OV2-1	FT/1-5	EX/1-4Rb	EXP/4-5	EX/2-2
OV2-2	FT/2-1	EX/1-4Rc	EXP/4-6	EX/3-4
OV2-3	FT/3-1Ra	EX/1-5	EXP/4-7	EXP/5-2
OV2-4	FT/3-1Rb	EX/3-1	EXP/4-8	EXP/5-3
OV2-5	FT/3-1Rc	EX/8-3	EXP/4-9	EXP/5-4
OV3-1	FT/4-1	EX/8-2Ra	EXP/4-10	EXP/5-5
OV3-2	FT/4-2Ra	EX/8-2Rb	EXP/4-11	EX/2-4
OV3-3	FT/4-2Rb	EX/8-1Ra	EXP/4-12	EX/2-1
OV3-4	FT/4-3Ra	EX/8-1Rb	EXP/4-13	EX/2-3
OV4-1	FT/4-3Rb	EX/3-2	EXP/4-14	EXP/5-6
OV4-2	FT/4-4	EX/3-3	EXP/4-15	EX/2-5
OV4-3	FT/4-5Ra	EX/8-4	EXP/4-16	EXP/5-7
OV4-4	FT/4-5Rb	EX/3-4	EXP/4-17	EXP/5-8
OV4-5	FT/2-1	EX/8-5	EXP/4-18	EXP/5-9
OV5-1	FT/2-2	EX/3-5	EXP/4-19	EXP/5-10
OV5-2Ra	FT/2-3	EX/3-6	EXP/4-20	EXP/5-11
OV5-2Rb	FT/2-4	EX/3-7	EXP/4-21	EXP/5-12
OV5-3	FT/2-5	EX/3-8	EXP/4-22	EXP/5-13
OV5-4	FT/2-6	EX/3-9	EXP/4-23	EXP/5-14
OV/PI-1	FT/2-7	EX/3-10	EXP/4-24	EXP/5-15
	FT/2-8	EX/3-11	EX/9-4	EXP/5-16
	FT/2-9	FT/3-1	EXP/4-25	EXP/5-17
	FT/2-10	FT/3-2	EXP/4-26	EXP/5-18
	FT/2-11	FT/3-3	EXP/4-27	EXP/5-19
	FT/2-12	FT/3-4	EX/9-1	EXP/5-20
	FT/2-13	FT/3-5	EX/9-2	EXP/5-21
	FT/2-14	FT/3-6	EX/9-3	EXP/5-22
	FT/2-15	FT/3-7	TH/3-1	EXP/5-23
	FT/2-16	FT/3-8	TH/3-2	EXP/5-24
	FT/2-17	FT/3-9	TH/3-3	EXP/5-25
	FT/2-18	FT/3-10	TH/7-1	EXP/5-26
	FT/2-19	FT/3-11	TH/4-1	EXP/5-27
	FT/2-20	FT/3-12	TH/4-2	EXP/5-28
	FT/2-21	FT/3-13	TH/4-3	EXP/5-29
	FT/2-22	FT/3-14	TH/4-4	EXP/5-30
	FT/2-23	FT/3-15	TH/4-5	EXP/5-31
	FT/2-24	FT/3-16	TH/4-6	EXP/5-32
	FT/2-25	FT/3-17	TH/4-7	EX/10-1
	FT/2-26	FT/3-18	TH/4-8	EX/10-2Ra
	FT/2-27	FT/3-19	TH/4-9	EX/10-2Rb
	FT/2-28	FT/3-20	TH/4-10	EXP/5-33
	FT/2-29	FT/3-21	TH/4-11	EXP/5-34
	FT/2-30	FT/3-22	TH/4-12	EXP/5-35
	FT/2-31	FT/3-23	TH/4-13	EXP/5-36
	SE/2-1	FT/3-24	TH/4-14	EXP/5-37
	SE/1-1	FT/3-25	TH/4-15	EXP/5-38
		FT/3-26	TH/4-16	EXP/5-39
		TH/3-4	TH/4-17	EXP/5-40
		TH/3-5	TH/4-18	EXP/5-41
		TH/6-1	TH/4-19	EXP/5-42
		TH/3-1	TH/4-20	EXP/5-43
		TH/3-2	TH/4-21	TH/1-1
		TH/3-3	TH/4-22	TH/8-1
		TH/3-4	IC/P4-1	TH/8-2
		TH/3-5	IC/P4-2	TH/8-3
		TH/3-6	IC/P4-3	
		TH/3-7	IC/P4-4	
		TH/3-8	IC/P4-5	
		TH/3-9	IC/P4-6	
		TH/3-10	IC/P4-7	
		TH/3-11	IC/P4-8	
		TH/3-12	IC/P4-9	
		TH/3-13	IC/P4-10	
		TH/3-14	IC/P4-11	
		TH/3-15	IC/P4-12	
		TH/3-16	IC/P4-13	
		TH/3-17		
		TH/3-18		

P6 Thursday AM	P7 Thursday PM	P8 Friday AM	P9, PD Friday PM
ELMs, Pedestal, Iter, Experiments-Heating&CD	Inertial Fusion, Iter	Energetic Particles, Alfvén Eigen-modes, Theory-Confinement	High-Beta, Stability, Post-Deadline, Theory-Stability
73	61	63	71
24	24	24	24
97	85	87	95
EXP/6-1	IF/1-1	EX/P8-1	PD/1-1
EXP/6-2	IF/P7-3	EX/P8-2	PD/1-2
EXP/6-3	IF/P7-18	EX/P8-3	PD/P1-1
EXP/6-4	IF/P7-22	EX/P8-4	PD/P1-2
EX/4-4Ra	IF/1-2	EX/P8-5	PD/P1-3
EX/4-4Rb	IF/P7-10	EX/P8-6	PD/P1-4
EX/4-5	IF/P7-13	EX/P8-7	PD/P1-5
EXP/6-5	IF/P7-4	EX/P8-8	PD/P1-6
EXP/6-6	IF/P7-24	EX/P8-9	PD/P1-7
EXP/6-7	IF/P7-31	EX/P8-10	PD/P1-8
EXP/6-8	IF/P7-25	EX/P8-11	PD/P1-9
EXP/6-9	IF/1-3	EX/P8-12	PD/P1-10
EXP/6-10	IF/P7-16	EX/6-1	EX/5-1
EXP/6-11	IF/P7-30	EX/6-2	EX/5-2
EXP/6-12	IF/P7-6	EX/6-3	EX/5-3Ra
EXP/6-13	IF/P7-19	TH/5-1	EX/5-3Rb
EXP/6-14	IF/P7-17	TH/5-2	EX/5-4
EXP/6-15	IF/P7-2	TH/5-1	EX/7-1Ra
EXP/6-16	IF/P7-12	TH/5-2	EX/7-1Rb
EXP/6-17	IF/P7-26	TH/5-3	EX/7-2Ra
EXP/6-18	IF/P7-21	TH/5-4	EX/7-2Rb
EXP/6-19	IF/P7-20	TH/5-5	EX/7-2Rc
EXP/6-20	IF/P7-8	TH/5-6	EX/7-3Ra
EXP/6-21	IF/P7-11	TH/5-46	EX/7-3Rb
EXP/6-22	IF/P7-15	TH/5-7	EX/7-3Rc
EXP/6-23	IF/P7-5	TH/5-8	EX/P9-1
EXP/6-24	IF/P7-14	TH/5-9	EX/P9-2
EXP/6-25	IF/P7-29	TH/5-10	EX/P9-3
EXP/6-26	IF/P7-23	TH/5-11	EX/P9-4
EXP/6-27	IF/P7-32	TH/5-12	EX/P9-5
EXP/6-28	IF/P7-27	TH/5-13	EX/P9-6
EXP/6-29	IF/P7-28	TH/5-14	EX/P9-7
EXP/6-30	IF/P7-7	TH/5-15	EX/P9-8
EXP/6-31	IF/P7-9	TH/5-16	EX/P9-9
EXP/6-32	IT/2-1	TH/5-17	EX/P9-10
EXP/6-33	IT/2-2	TH/5-18	EX/P9-11
EX/4-1	IT/2-3	TH/5-19	EX/P9-12
EX/4-2	IT/2-4Ra	TH/5-20	TH/4-1
EX/4-3Ra	IT/2-4Rb	TH/5-21	TH/4-2
EX/4-3Rb	IT/P7-1	TH/5-22	TH/P9-1
IT/1-1	IT/P7-2	TH/5-23	TH/P9-2
IT/1-2	IT/P7-3	TH/5-24	TH/P9-3
IT/1-3	IT/P7-4	TH/5-25	TH/P9-4
IT/1-4	IT/P7-5	TH/5-26	TH/P9-5
IT/1-5	IT/P7-6	TH/5-27	TH/P9-6
IT/P6-1	IT/P7-7	TH/5-28	TH/P9-7
IT/P6-2	IT/P7-8	TH/5-29	TH/P9-8
IT/P6-3	IT/P7-9	TH/5-30	TH/P9-9
IT/P6-4	IT/P7-10	TH/5-31	TH/P9-10
IT/P6-5	IT/P7-11	TH/5-32	TH/P9-11
IT/P6-6	IT/P7-12	TH/5-33	TH/P9-12
IT/P6-7	IT/P7-13	TH/5-34	TH/P9-13
IT/P6-8	IT/P7-14	TH/5-35	TH/P9-14
IT/P6-9	IT/P7-15	TH/5-36	TH/P9-15
IT/P6-10	IT/P7-16	TH/5-37	TH/P9-16
IT/P6-11	IT/P7-17	TH/5-38	TH/P9-17
IT/P6-12	IT/P7-18	TH/5-39	TH/P9-18
IT/P6-13	IT/P7-19	TH/5-40	TH/P9-19
IT/P6-14	IT/P7-20	TH/5-41	TH/P9-20
IT/P6-15	IT/P7-21	TH/5-42	TH/P9-21
IT/P6-16	IT/P7-22	TH/5-43	TH/P9-22
IT/P6-17		TH/5-44	TH/P9-23
IT/P6-18		TH/5-45	TH/P9-24
IT/P6-19			TH/P9-25
IT/P6-20			TH/P9-26
IT/P6-21			TH/P9-27
IT/P6-22			TH/P9-28
IT/P6-23			TH/P9-29
IT/P6-24			TH/P9-30
IT/P6-25			TH/P9-31
IT/P6-26			TH/P9-32
TH/2-1Ra			
TH/2-1Rb			

NOTES