

## Provisional Programme for the 20th Fusion Energy Conference

Day Date	Sunday 31 October 2004	Monday 1 November 2004	Tuesday 2 November 2004	Wednesday 3 November 2004	Thursday 4 November 2004	Friday 5 November 2004	Saturday 6 November 2004
<b>08:30 - 10:20</b>		<p>WELCOME</p> <p>Fusion Pioneers Memorial Session <i>(Chair: Kaw, P., India)</i></p>	<p>Overview Magnetic Fusion</p> <p><b>OV/4</b> <i>(Matsuda, S., Japan)</i></p>	<p>Transport Theory</p> <p><b>TH/1</b> <i>(Kishimoto, Y., Japan)</i></p>	<p>Alfven modes and wave heating</p> <p><b>EX/5, TH/3</b> <i>(Saoutic, B., France)</i></p>	<p>Transport and Turbulence</p> <p><b>EX/8, TH/7</b> <i>(Ohyabu, N., Japan)</i></p>	<p>Configuration effects and transport</p> <p><b>EX/9</b> <i>(Sanchez, J., Spain)</i></p>
Coffee Break							
<b>10:40 - 12:50</b>	<p>IFRC Meeting</p>	<p>Overview Magnetic Fusion</p> <p><b>OV/1</b> <i>(Romanelli, F, Italy)</i></p>	<p>Overview</p> <p>Advanced Scenarios and Steady State</p> <p><b>OV/5, EX/1</b> <i>(Pan, C.H., China)</i></p>	<p>Beta Limits</p> <p><b>TH/2, EX/3</b> <i>(Strait, E.J., USA)</i></p>	<p>Operational Limits and momentum Transport</p> <p><b>EX/6, TH/4</b> <i>(Marmar, E.S, USA)</i></p>	<p>Turbulence Modelling</p> <p>Postdeadline</p> <p><b>TH/8, PD/1</b> <i>(Lackner, K., Germany)</i></p>	<p>Plasma-wall Interaction</p> <p><b>EX/10</b> <i>(Singh, R., India)</i></p>
Lunch							
<b>14:15 - 16:10</b>	<p>IFRC Meeting</p>	<p>Overview Magnetic Fusion</p> <p><b>OV/2</b> <i>(Sauthoff, N.R., USA)</i></p>	<p>Edge localized modes</p> <p><b>EX/2</b> <i>(Takamura, S., Japan)</i></p>	<p>Hybrid scenarios, H-mode and Transport</p> <p><b>EX/4</b> <i>(Klinger, Th., Germany)</i></p>	<p>Energetic Particles and Stability</p> <p><b>TH/5</b> <i>(Chan, V. S., USA)</i></p>	<p>Inertial Fusion</p> <p><b>IF/1, FT/2</b> <i>(Mima, K., Japan)</i></p>	<p>Summary</p> <p><b>S/1</b> <i>(Varandas, C., Portugal)</i></p>
Coffee Break							
<b>16:30 - 18:30</b>	<p>IFRC Meeting Registration (16:30 - 20:00)</p>	<p>Overview Inertial Fusion</p> <p><b>OV/3</b> <i>(Perlado, J.M., Spain)</i></p>	<p>Fusion Technology</p> <p><b>FT/1</b> <i>(Tran, M.Q. Switzerland)</i></p>	<p>ITER</p> <p><b>IT/1</b> <i>(Lee, G.S., Korea Rep.)</i></p>	<p>Neoclassical Tearing Modes</p> <p><b>EX/7, TH/6</b> <i>(Razumova, K. Russia)</i></p>	<p>Fusion Technology</p> <p><b>FT/3</b> <i>(Smirnov, V., Russia)</i></p>	<p>Summary <b>S/1(cont.)</b> <i>(Varandas, C., Portugal)</i></p> <p>CLOSING</p>
Break							
		<p>Reception</p>	<p>Social Programme</p>	<p>ITER Evening Session</p>	<p>Conference Dinner</p>		

## Provisional Agenda for Poster Sessions

Day Date	Sunday 31 October 2004	Monday 1 November 2004	Tuesday 2 November 2004	Wednesday 3 November 2004	Thursday 4 November 2004	Friday 5 November 2004	Saturday 6 November 2004
08:30 - 10:20			<b>PO</b> Overview (all)	<b>P1</b> ELMs, Fusion Technology and Power Plant Design 1  Oral (Tuesday)	<b>P3</b> Hybrid Scenarios, ITER Activities, Safety, Environmental and Economic Aspects of Fusion  Oral (Wedn.)	<b>P5</b> Tearing Modes, Plasma Wall Interaction  Oral (Thursday, Saturday)	<b>P7, PD</b> Fusion Technology and Power Plant Design 2, Inertial Fusion Exp. and Theory Post-deadline  Oral (Friday)
Coffee Break							
10:40 - 12:50			<b>PO</b> Overview (all)	<b>P1</b>	<b>P3</b>	<b>P5</b>	<b>P7, PD</b>
Lunch							
14:15 - 16:10			<b>PO</b> Overview (all)	<b>P2</b> Beta Limits, Advanced Scenarios, Configurational Effects on Transport  Oral (Tuesday)	<b>P4</b> Operational Limits, Heating and Current Drive, Fast Particles  Oral (Wedn.)	<b>P6</b> Turbulent Transport Theory, Turbulent Transport Experiment, Innovative Concepts  Oral (Thursday, Saturday)	Closing
Coffee Break							
16:30 - 18:30			<b>PO</b> Overview (all)	<b>P2</b>	<b>P4</b>	<b>P6</b>	
Break							
		Reception	Social Programme	ITER	Conference Dinner		

\*Overview posters will be displayed during the whole Tuesday, Wednesday, Thursday and Friday !!!

## Provisional Programme for the 20th Fusion Energy Conference

01-Nov-04

Welcome & Fusion Pioneers Memorial 08:30 - 10:20	Welcome Burkart, W. IAEA
	FPM/1 Ferreira, C.M. (20') Portugal ITER in the Route for Fusion Energy
	FPM/2 Llewellyn Smith, C. (30') U.K. The Fast Track to Fusion Power
	FPM/3 Shimomura, Y. (30') ITER ITER Towards the construction

Coffee Break

Overview Magnetic Fusion 10:40 - 12:50	OV/1-1 Ide, S. (25') Japan Overview of JT-60U Progress Towards Steady-state Advanced Tokamak
	OV/1-2 Pamela, J. (25') EC / U.K. Overview of JET results
	OV/1-3 Luce, T.C. (25') USA Development of Burning Plasma and Advanced Scenarios in the DIII-D Tokamak
	OV/1-4 Motojima, O. (25') Japan Confinement and MHD stability in the Large Helical Device
	OV/1-5 Guenter, S. (25') Germany Overview of ASDEX Upgrade Results

Lunch Break

Overview Magnetic Fusion 14:15 - 16:10	OV/2-1 Diamond, P.H. (25') USA Overview of Zonal Flow Physics
	OV/2-2 Jacquinot, J. (25') France Steady-state operation of Tokamaks: key physics and technology developments on Tore Supra.
	OV/2-3 Kaye, S.M. (25') USA Progress Towards High Performance Plasmas in the National Spherical Torus Experiment (NSTX)
	OV/2-4 Counsell, G.F. (25') U.K. Overview of MAST results
	OV/2-5 Greenwald, M.J. (25') USA Overview of Alcator C-Mod Research Program

Coffee Break

Overview Inertial Fusion 16:30 - 18:30	OV/3-1 Lindl, J.D. (25') USA Recent Advances in Indirect Drive ICF Target Physics
	OV/3-2 Izawa, Y. (25') Japan Laser Fusion research with GEKKO XII and PW laser system at Osaka
	OV/3-3 McCrory, R.L. (25') USA Direct-Drive Inertial Confinement Fusion Research at the Laboratory for Laser Energetics: Charting the Path to Thermonuclear Ignition
	OV/3-4 Sharkov, B.Yu. (25') Russian Fed. Acceleration Technology and Power Plant Design for Fast Ignition Heavy Ion Inertial Fusion Energy
	OV/3-5Ra <u>Olson, C.L. (25')</u> USA Progress on Z-Pinch Inertial Fusion Energy
	OV/3-5Rb To rapp. Haines, M.G U.K. Wire Array Z pinch precursors, implosions and stagnation
	OV/3-5Rc To rapp. Grabovski, E.V Russian Fed. The Research of Radiating Z Pinches for the Purposes of ICF

Reception

## Provisional Programme for the 20th Fusion Energy Conference

02-Nov-04

<i>Overview Magnetic Fusion 08:30 - 10:20</i>	OV/4-1	Stork, D. (18')	U.K.	Overview of Transport, Fast Particle and Heating and Current Drive Physics using Tritium in JET plasmas
	OV/4-2	Prager, S.C. (18')	USA	Overview of Results in the MST Reversed Field Pinch
	OV/4-3	Alejandre, C. (18')	Spain	Overview of TJ-II experiments
	OV/4-4	Verskov, V.A. (18')	Russia	Summary of Experimental Core Turbulence Characteristics in OH and ECRH T-10 Tokamak Plasmas.
	OV/4-5	Moret, J.-M. (18')	Switzerland	Progress in the understanding and the performance of ECH and plasma shaping on TCV
	OV/4-6	Gormezano, C. (18')	Italy	Overview of FTU results

Coffee Break

<i>Overview, Advanced Scenarios and Steady State 10:40 - 12:50</i>	OV/5-1Ra	<u>Liu, Y. (18')</u>	China	Recent Advances on the HL-2A Tokamak Experiments
	OV/5-1Rb	To rapp. Wan, B.N.	China	Overview of the last HT-7 experiments
	OV/5-2	Zushi, H. (18')	Japan	Overview of steady-state tokamak operation in TRIAM-1M
	EX/1-1	Tuccillo, A. A. (18')	Italy	Development on JET of Advanced Tokamak operations for ITER
	EX/1-2	Murakami, M. (18')	USA	100 Percent Noninductive Operation at High Beta Using Off-axis ECCD
	EX/1-3	Suzuki, T. (18')	Japan	Steady State High beta n Discharges and Real-Time Control of Current Profile in JT-60U
	EX/1-4	Suttrop, W.A. (18')	Germany	Studies of the "Quiescent H-mode" regime in ASDEX Upgrade and JET
	EX/1-5	Harris, J. H., <u>Yamada, H. (18')</u>	Australia	Confinement Study of Net-Current Free Toroidal Plasmas Based on the Extended International Stellarator Database

Lunch Break

<i>Edge Localized Modes 14:15 - 16:10</i>	EX/2-1	Oyama, N. (18')	Japan	Energy loss for grassy ELMs and effect of plasma rotation on the ELM characteristics in JT-60U
	EX/2-2	Maingi, R. (18')	USA	H-mode pedestal, ELM, and power threshold studies in NSTX
	EX/2-3	Kirk, A. (18')	U.K.	The structure of ELMs and the distribution of transient power loads in MAST
	EX/2-4Ra	<u>Fundamenski, W. (18')</u>	U.K.	Power Exhaust on JET: an Overview of Dedicated Experiments
	EX/2-4Rb	To rapp. Herrmann, A.	Germany	Wall and divertor heat load during ELMy H-mode and Disruptions in ASDEX Upgrade
	EX/2-5Ra	<u>Evans, T.E. (18')</u>	USA	Suppression of Large Edge Localized Modes With a Resonant Magnetic Perturbation in High Confinement DIII-D Plasmas
	EX/2-5Rb	To rapp. Fenstermacher, M. E.	USA	Structure, Stability and ELM Dynamics of the H-mode Pedestal in DIII-D
	EX/2-6	Lang, P.T. (18')	Germany	Integrated exhaust scenarios with actively controlled ELMs

Coffee Break

<i>Fusion Technology 16:30 - 18:30</i>	FT/1-1Ra	<u>Litvak, A.G. (18')</u>	Russian Fed.	New Results in Development of MW Output Power Gyrotrons for Fusion Systems
	FT/1-1Rb	To rapp. Kasugai, A.	Japan	Performance of 170 GHz high-power gyrotron for CW operation
	FT/1-1Rc	To rapp. Piosczyk, B.	Germany	Development of Steady-State 2-MW 170-GHz Gyrotrons for ITER
	FT/1-2Ra	<u>Inoue, T. (18')</u>	Japan	R&D on a High Energy Accelerator and a Large Negative Ion Source for ITER
	FT/1-2Rb	To rapp. Tsumori, K	Japan	Improvement of Negative Ion Source with Multi-Slot Grids for LHD-NBI
	FT/1-2Rc	To rapp. Falter, H.D.	Germany	Status and plans for the development of an RF negative ion source for ITER NBI
	FT/1-3	Goulding, R.H. (18')	USA	Results and Implications of the JET ITER-Like ICRF Antenna High Power Prototype Tests
	FT/1-4	Jitsukawa, S.J. (18')	Japan	Progress of Reduced Activation Ferritic/Martensitic Steel Development in Japan
	FT/1-5	Spatig, P. (18')	Switzerland	Assessment of plastic flow and fracture properties with small specimen test techniques for IFMIF-designed specimens

Social Programme

## Provisional Programme for the 20th Fusion Energy Conference

03-Nov-04

Transport Theory 08:30 - 10:20	TH/1-1	Callen, J.D. (18')	USA	Paleoclassical Electron Heat Transport
	TH/1-2	del-Castillo-Negrete, D. (18')	USA	Non-diffusive transport in 3-D pressure driven plasma turbulence
	TH/1-3Ra	<u>Ghendrih, Ph. (18')</u>	France	Scaling Intermittent Cross-Field Particle Flux to ITER
	TH/1-3Rb	To rapp. Benkadda, S.	France	Nonlinear Dynamics of Transport Barrier Relaxations in Fusion Plasmas
	TH/1-3Rc	To rapp. Becoulet, M.	France	Non-linear Heat Transport Modelling with Edge Localized Modes and Plasma Edge Control in Tokamaks.
	TH/1-3Rd	To rapp. Falchetto, G.L.	France	Impact of zonal flows on turbulent transport in tokamaks
	TH/1-4	Hahm, T.S. (18')	USA	Gyrokinetic Studies of Turbulence in Steep Gradient Region: Role of Turbulence Spreading and ExB Shear
	TH/1-5	(Xu, X.Q.), <u>T. Rognlén(18')</u>	USA	Density effects on tokamak edge turbulence and transport with magnetic X-points
TH/1-6	Hayashi, N. (18')	Japan	Profile Formation and Sustainment of Autonomous Tokamak Plasma with Current Hole Configuration	

Coffee Break

Beta Limits 10:40 - 12:50	EX/3-1Ra	<u>Okabayashi, M. (18')</u>	USA	Control of the Resistive Wall Mode With Internal Coils in the DIII-D Tokamak
	EX/3-1Rb	To rapp. Reimerdes, H.	USA	Active Measurement of Resistive Wall Mode Stability in Rotating High Beta Plasmas
	EX/3-2	Sabbagh, S.A. (18')	USA	Wall Stabilized Operation in High Beta NSTX Plasmas
	TH/2-1	Liu, Y.Q. (18')	Sweden	Feedback and Rotational Stabilization of Resistive Wall Modes in ITER
	TH/2-2	Strauss, H. R. (18')	USA	Halo Current and Resistive Wall Simulations of ITER
	EX/3-3	Watanabe, KY (18')	Japan	Effects of global MHD instability on operational high-beta regime in LHD
	EX/3-4	Zarnstorff, M.C. (18')	USA	Equilibrium and Stability of High-Beta Plasmas in Wendelstein 7-AS
	TH/2-3	Miura, H. (18')	Japan	Non-disruptive MHD Dynamics in Inward-shifted LHD Configurations

Lunch Break

Hybrid Scenarios, H-mode and Transport 14:15 - 16:10	EX/4-1	Wade, M.R. (18')	USA	Development, Physics Basis, and Performance Projections for Hybrid Scenario Operation in ITER on DIII-D
	EX/4-2	Joffrin, E. H. (18')	France	The "hybrid" scenario in JET: towards its validation for ITER
	EX/4-3	Sakamoto, Y (18')	Japan	Stationary high confinement plasmas with large bootstrap current fraction in JT-60U
	EX/4-4	Akers, R.J. (18')	U.K.	Comparison of plasma performance and transport between tangential co- and counter-NBI heated MAST discharges.
	EX/4-5	Staabler, A. (18')	Germany	The Improved H-Mode at ASDEX Upgrade: a Candidate for an ITER Hybrid Scenario
	EX/4-6Ra	<u>Kamiya, K (18')</u>	Japan	Studies of HRS H-mode plasma in the JFT-2M tokamak
	EX/4-6Rb	To rapp. Ido, T.	Japan	Electrostatic fluctuation and fluctuation-induced particle flux during formation of the edge transport barrier in the JFT-2M tokamak

Coffee Break

ITER 16:30 - 18:30	IT/1-1	Shimada, M. (18')	ITER / Japan	Progress in physics basis and its impact on ITER
	IT/1-2	Saibene, G. (18')	EC / Germany	Dimensionless identity experiments in JT-60U and JET
	IT/1-3	Gordon, C. (18')	ITER / Germany	ITER Licensing
	IT/1-4	Mitchel, N. (18')	ITER / Germany	Design of the ITER Magnets to Provide Plasma Operational Flexibility
	IT/1-5	Ioki, K. (18')	ITER / Germany	Convergence of Design and Fabrication Methods for ITER Vacuum Vessel and In-vessel Components

ITER Evening, tentative

## Provisional Programme for the 20th Fusion Energy Conference

04-Nov-04

Alfvén Modes and Wave Heating 08:30 - 10:20	EX/5-1	Nazikian, R. (18')	USA	Energetic Particle Driven Modes in Advanced Tokamak Regimes on JET, DIII-D, Alcator C-MOD and TFTR
	EX/5-2Ra	<u>Sharapov, S.E. (18')</u>	U.K.	Experimental studies of instabilities and confinement of energetic particles on JET and on MAST
	EX/5-2Rb	To rapp. Ishikawa, M.	Japan	Energetic Ion Transport by Alfvén Eigenmode Induced by Negative-Ion-Based Neutral Beam Injection in the JT-60U Reversed Shear and Weak Shear Plasmas
	EX/5-3	Fredrickson, E.D. (18')	USA	Study of aspect ratio effects on MHD instabilities
	TH/3-1Ra	<u>Todo, Y. (18')</u>	Japan	Nonperturbative effects of energetic ions on Alfvén eigenmodes
	EX/5-4Rb	To rapp. Yamamoto, S.	Japan	Configuration Dependence of Energetic Ion Driven Alfvén Eigenmodes in the Large Helical Device
	EX/5-5	Pericoli Ridolfini, V. (18')	Italy	LHCD and Coupling Experiments with an ITER-like PAM launcher on the FTU tokamak
EX/5-6	Gusev, V.K. (18')	Russian Fed.	ICRH experiments on the spherical tokamak Globus-M	

Coffee Break

Operational Limits and Momentum Transport 10:40 - 12:50	EX/6-1	Takenaga, H. (18')	Japan	Compatibility of advanced tokamak plasma with high density and high radiation loss operation in JT-60U
	EX/6-2	Peterson, B. J. (18')	Japan	Density Limit Studies in the Large Helical Device
	EX/6-3	Sartori, R. (18')	EC / Germany	Scaling Study of ELMy H-Mode Global and Pedestal Confinement at high triangularity in JET
	EX/6-4Ra	<u>Rice, J.E. (18')</u>	USA	The Role of Rotation in the H-mode Transition in Different Magnetic Configurations and Anomalous Momentum Transport in Alcator C-Mod Plasmas with No Momentum In
	EX/6-4Rb	To rapp. deGrassie, J.S.	USA	Plasma Rotation in Electron Cyclotron Heated H-modes in DIII-D
	EX/6-5	Wolf, R. C. (18')	Germany	Effect of the Dynamic Ergodic Divertor in the TEXTOR Tokamak on MHD Stability, Plasma Rotation and Transport
	EX/6-6	McDonald, D. C (18')	U.K.	Particle and Energy Transport in Dedicated rho*, beta and nu* Scans in JET ELMy H-modes
TH/4-1	Ernst, D.R. (18')	USA	Mechanisms for ITB Formation and Control in Alcator C-Mod Identified through Gyrokinetic Simulations of TEM Turbulence	

Lunch Break

Energetic Particles and Stability 14:15 - 16:10	TH/5-1	Zonca, F. (18')	Italy	Transition from weak to strong energetic ion transport in burning plasmas
	TH/5-2Ra	<u>Berk, H. L. (18')</u>	USA	Theoretical Studies of Alfvén Wave - Energetic Particle Interactions
	TH/5-2Rb	To rapp. Gorelenkov, N. N.	USA	Fast ion effects on fishbones and n=1 kinks in JET simulated by a non-perturbative NOVA-KN code
	TH/5-3	Nabais, F. J. R. (18')	Portugal	Internal kink mode stability in the presence of ICRH driven fast ions populations
	TH/5-4	Guzdar, P. N. (18')	USA	Theory and Theory-based Models for the Pedestal, Edge Stability and ELMs in Tokamaks
	TH/5-5	Connor, J.W (18')	U.K.	The stability of internal transport barriers to MHD ballooning modes and drift waves: a formalism for low magnetic shear and for velocity shear
	TH/5-6	Nakajima, N (18')	Japan	Boundary modulation effects on MHD instabilities in Heliotrons

Coffee Break

Neoclassical Tearing Modes 16:30 - 18:30	EX/7-1	Buttery (18')	U.K.	Cross-machine NTM physics studies and implications for ITER
	TH/6-1	Sen, A. (18')	India	Effect of sheared flows on neoclassical tearing modes
	TH/6-2	Poli, E. (18')	Germany	Kinetic Calculations of the NTM Polarisation Current: Reduction for Small Island Widths and Sign Reversal Near the Diamagnetic Frequency
	TH/6-3	Pustovitov, V.D. (18')	Russian Fed.	A Possible Mechanism for the Seed Island Formation
	EX/7-2	Maraschek, M. (18')	Germany	Active Control of MHD Instabilities by ECCD in ASDEX Upgrade
	EX/7-3	Petty, C.C. (18')	USA	Onset and Suppression of 2/1 NTM in DIII-D
	EX/7-4	Nagasaki, K. (18')	Japan	Stabilization of Neoclassical Tearing Mode by Electron Cyclotron Current Drive and Its Evolution Simulation on JT-60U Tokamak

Conference Dinner

## Provisional Programme for the 20th Fusion Energy Conference

05-Nov-04

Transport and Turbulence 8:30 - 10:20	EX/8-1	Castejón, F. (18')	Spain	On the influence of the magnetic topology on transport and radial electric fields in the TJ-II stellarator
	EX/8-2	Hoang, G.T. (18')	France	Turbulent Particle Transport in Tore Supra
	EX/8-3	Gerhardt, S.P. (18')	USA	Measurement and Modeling of Electrode Biased Discharges in the HSX Stellarator
	EX/8-4Ra	<u>Antoni, V. (18')</u>	Italy	Turbulent transport and plasma flow in the Reversed Field Pinch
	EX/8-4Rb	To rapp. Xu, G.S.	China	Generation of Sheared Poloidal Flows by Electrostatic and Magnetic Reynolds Stress in the Boundary Plasma of HT-7 Tokamak
	EX/8-5Ra	<u>Okamura, S. (18')</u>	Japan	Edge and Internal Transport Barrier Formation in CHS
	EX/8-5Rb	To rapp. Fujisawa, A.	Japan	Experimental Studies of Zonal Flows in CHS and JIPPT-IIU
TH/7-1	Scott, B.D (18')	Germany	The Confluence of Edge and Core Turbulence and Zonal Flows in Tokamaks	

Coffee Break

Turbulence Modelling 10:40 - 12:50	TH/8-1	Idomura, Y (18')	Japan	Global Gyrokinetic Simulations of Toroidal Electron Temperature Gradient Driven Mode in Reversed Shear Tokamaks
	TH/8-2	Waltz, R.E. (18')	USA	Advances in Comprehensive Gyrokinetic Simulations of Transport in Tokamaks
	TH/8-3Ra	<u>Hamaguchi, S (18')</u>	Japan	Intermittent Transport and Relaxation Oscillations of Nonlinear Reduced Models for Fusion Plasmas
	TH/8-3Rb	To rapp.: Watanabe T.-H.	Japan	Velocity-Space Structures of Distribution Function in Toroidal Ion Temperature Gradient Turbulence
	TH/8-4	Lin, Z (18')	USA	Electron Thermal Transport in Tokamak: ETG or TEM Turbulences?
	TH/8-5Ra	<u>Li, J.Q (18')</u>	China	Dynamics of large-scale structure and electron transport in tokamak microturbulence simulations
	TH/8-5Rb	To rapp. Miyato, N.	Japan	Study of drift wave-zonal mode system based on global electromagnetic Landau-fluid ITG simulation in toroidal plasmas
	PD/1-1	(Post Deadline)		
PD/1-2	(Post Deadline)			

Lunch Break

Inertial Fusion 14:15 - 16:10	IF/1-1Ra	<u>Azechi, H. (18')</u>	Japan	New Mitigation Schemes of the Ablative Rayleigh-Taylor Instability
	IF/1-1Rb	To rapp. Li, D.	China	Effects of Magnetic Field, Shear Flow and Ablative Flow on the Rayleigh-Taylor Instability
	IF/1-2	Logan, B.G. (18')	USA	Overview of U.S. Heavy-Ion Fusion Progress
	IF/1-3	Holstein, P.A. (18')	France	Update on LMJ Target Physics
	IF/1-4Ra	Tanaka, K. (18')	Japan	Direct Heating and Basic Experiments for Fast Ignition
	IF/1-4Rb	To rapp. <u>Key, M.H</u>	USA	Comparative Study of Electron and Proton Heating for Fast Ignition
	IF/1-5	Nakao, Y. (18')	Japan	Two-Dimensional Fokker-Planck Analysis of Core Plasma Heating by Relativistic Electrons
	FT/2-1Ra	<u>Kilkenny, J.D. (18')</u>	USA	From One-of-a-kind to 500,000 High Quality Ignition Targets Per Day
FT/2-1Rb	To rapp. Norimatsu, T.	Japan	Development of Key Technologies in DPSSL System for Fast-ignition, Laser Fusion Reactor-FIREX, HALNA, and Protection of Final Optics	

Coffee Break

Fusion Technology 16:30 - 18:30	FT/3-1Ra	<u>Wilson, H.R. (18')</u>	U.K.	The Spherical Tokamak as a Components Test Facility
	FT/3-1Rb	To rapp. Peng, Y.-K.M.	USA	Physics and Engineering Assessments of Spherical Torus Component Test Facility
	FT/3-2	Oh, Y.K. (18')	Korea Rep.	Result of the KSTAR Superconducting Coil Tests
	FT/3-3	Wan, Y.X. (18')	China	Progress of the EAST project in China
	FT/3-4Ra	<u>Saxena, Y.C. (18')</u>	India	First experiments with SST-1 Tokamak
	FT/3-4Rb	To rapp. Pradhan, S.	India	Superconducting Magnets of SST-1 Tokamak
FT/3-5	Wagner, F. (18')	Germany	Physics, technologies and status of the Wendelstein 7-X device	
FT/3-6	Sagara, A. (18')	Japan	Improved Structure and Long-life Blanket Concepts for Heliotron Reactors	

## Provisional Programme for the 20th Fusion Energy Conference

06-Nov-04

<i>Configuration effects and transport</i> <b>08:30 - 10:20</b>	EX/9-1	Pochelon, A. (18')	Switzerland	Effect of Plasma Shape on Electron Heat Transport in the Presence of extreme Temperature Gradients in TCV
	EX/9-2	Sano, F. (18')	Japan	Confinement Studies of Helical-axis Heliotron Plasmas
	EX/9-3	Kitajima, S. (18')	Japan	LH Transition by a Biased Hot Cathode in the Tohoku University Heliac
	EX/9-4	Silva, C. (18')	Portugal	Limiter and Emissive Electrode Biasing Experiments on the Tokamak ISTTOK
	EX/9-5	Wood, R.D. (18')	USA	Improved Operation and Modeling of the SSPX Spheromak
	EX/9-6Ra	<u>Kwon, Myeon (18')</u>	Korea Rep.	Progress in the Study of Plasma Heating, Stability, and Confinement on HANBIT Mirror Device
	EX/9-6Rb	To rapp. Jhang, H. G.	Korea Rep.	Influence of radio frequency waves on the interchange stability in HANBIT mirror plasmas
	EX/9-6Rc	To rapp. Koidan, V.S	Russian Fed.	Heating and Confinement of Ions at Multimirror Trap GOL-3
	EX/9-6Rd	To rapp. Cho, T.	Japan	Advances in Potential Formation and Findings in Sheared Radial Electric-Field Effects on Turbulence and Loss Suppression in GAMMA 10

Coffee Break

<i>Plasma-wall Interaction</i> <b>10:40 - 12:50</b>	EX/10-1	Philipps, V. (18')	Germany	Overview of recent work on material erosion, migration and long-term fuel retention in the EU-fusion programme and conclusions for ITER
	EX/10-2	Tsitrone, E. (18')	France	Deuterium retention in Tore Supra long discharges
	EX/10-3	Nakano, T. (18')	Japan	Impact of nearly-saturated divertor plates on particle control in long and high-power heated discharges in JT-60U
	EX/10-4	Komori, A. (18')	Japan	Edge Plasma Control by Local Island Divertor in LHD
	EX/10-5	Neu, R.L. (18')	Germany	Tungsten: An option for divertor and main chamber plasma facing components in future fusion devices
	EX/10-6Ra	<u>Hollman, E.M. (18')</u>	USA	Disruption Thermal Quench Mitigation by Noble Gas Jet Injection in DIII-D
	EX/10-6Rb	To rapp. Bakhtiari, M.	Japan	Disruption Mitigation Experiments in the JT-60U Tokamak
	EX/10-6Rc	To rapp. Martin, G.	France	Disruption Mitigation on Tore Supra

Lunch Break

<i>Summary</i> <b>14:15 - 16:10</b>	S/1-1	Ninomiya, H. (30')	Japan	EX-C, EX-D, IC (EX/1, EX/4, EX/6, EX/8, EX/9, EX/10)
	S/1-2	Stambaugh, R.D. (30')	USA	EX-S, EX-W (EX/2, EX/3, EX/5, EX/7)
	S/1-3	Connor, J. (30')	U.K.	TH

Coffee Break

<i>Summary</i> <b>16:30 - 17:45</b>	S/1-4	Basko, M.M. (30')	Russian Fed.	IF
	S/1-5	Wan, Yuanxi (30')	China	IT, FT, SE
		P.K. Kaw	India	Closing