Provisional Programme for the 21st Fusion Energy Conference (Oral Sessions)

Day Date	Sunday 15 October	Monday 16 October 2006	Tuesday 17 October 2006	Wednesday 18 October 2006	Thursday 19 October 2006	Friday 20 October 2006	Saturday 21 October 2006
08:30 - 10:15		WELCOME Fusion Pioneers Memorial Session **FPM**	Overview Magnetic Fusion **OV/2**	Overview Magnetic Fusion **OV/4**	Overview Inertial Inertial Fusion **OV/6, IF/1**	New Machines **FT/2**	ITER Systems **IT/2**
Coffee Break							
10:45 - 12:30	IFRC Meeting	Overview Magnetic Fusion **OV/1**	Overview Magnetic Fusion **OV/3**	Overview Inertial Fusion Reactors and **OV/5**	NTM/Disruptions **EX/4**	MHD Stability **EX/7**	ITER Post Deadline **IT/2, PD**
Lunch							
14:00 - 16:10	IFRC Meeting	Advanced Scenarios **EX/1**	Fluctuations **TH/1, EX/2**	Plasma Wall Interaction **EX/3**	3D Effects on Transport **EX/5**	Particle and Energy Transport **EX/8**	NF Ceremony SUMMARY **S/1**
Coffee Break							
16:40 - 18:45	IFRC Meeting Registration (16:30 - 19:30)	ITER **IT/1**	Transport Theory **TH/2**	Fusion Technology **FT/1**	Energetic Particles **EX/6, TH/3**	ELMs **EX/9, TH/4**	SUMMARY **S/1**(cont.) ***CLOSING***
Break							
		Reception (20:00)	ITER Evening Session **IT/E**	Banquet			

Provisional Programme for the 21st Fusion Energy Conference (Poster Sessions)

Day Date	Sunday 15 October 2006	Monday 16 October 2006	Tuesday 17 October 2006	Wednesday 18 October 2006	Thursday 19 October 2006	Friday 20 October 2006	Saturday 21 October 2006
08:30 - 10:15			**OV/P** Overview (all)*	**P2** Transport Theory SE ITER 2	**P4** Plasma Wall Interaction Fluctuations and Experiments on Transport	**P6, PD** Energetic Particles Current Drive and Waves Edge Theory Post Deadline	**P8** ELMs MHD Experiments
Coffee Break							
10:45 - 12:30	**IFRC**		**OV/P** Overview (all)*	**P2** Transport Theory SE ITER 2	**P4** Plasma Wall Interaction Fluctuations and Experiments on Transport	**P6, PD** Energetic Particles Current Drive and Waves Edge Theory Post Deadline	**P8** ELMs MHD Experiments
Lunch							
14:00 - 16:10	**IFRC**	**OV/P** Overview (all)*	**P1** Advanced Scenarios ITER 1	**P3** MHD Theory Particle and Energy Transport	**P5** Fusion Technology 1 Inertial Fusion	**P7** Fusion Technology 2 3D Effects on Transport Alternative Confinement Concepts Innovative Concepts	
Coffee Break							
16:40 - 18:45	**IFRC** **Registration**	**OV/P** Overview (all)*	**P1** Advanced Scenarios ITER 1	**P3** MHD Theory Particle and Energy Transport	**P5** Fusion Technology 1 Inertial Fusion	**P7** Fusion Technology 2 3D Effects on Transport Alternative Confinement Concepts Innovative Concepts	
Break							
		20:00 Reception	20:00 ITER Evening	Banquet			

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

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16-Oct-06

Welcome & Fusion Pioneers Memorial **08:30 - 10:15**				
Coffee Break				
OV/1 - Overview Magnetic Fusion **10:45 - 12:30** 4x25'	OV/1-1	Wan, Yuanxi	China, People's Rep.	Overview progress and future plan of EAST Project
	OV/1-2	Takenaga, H	Japan	Overview of JT-60U Results for Development of Steady-State Advanced Tokamak Scenario
	OV/1-3	Watkins, ML	European Commission (EC)	Overview of JET Results
	OV/1-4	Wade, MR	United States of America	Development in the DIII-D Tokamak of Advanced Operating Scenarios and Associated Control Techniques for ITER
Lunch Break				
EX/1 - Advanced Scenarios **14:00 - 16:10** 6x20'	EX/1-1	Sips, ACC	Germany	The performance of improved H-modes at ASDEX Upgrade and projection to ITER
	EX/1-2	Greenfield, CM	United States of America	Progress Toward High Performance Steady-State Operation in DIII-D
	EX/1-3	Oyama, N	Japan	Improved Performance in Long-pulse ELMy H-mode Plasmas with Internal Transport Barrier in JT-60U
	EX/1-4	Takase, Y	Japan	Evolution of Bootstrap-Sustained Discharge in JT-60U
	EX/1-5 (theory)	Chu, MS	United States of America	Maintaining the Quasi-Steady State Central Current Density Profile in Hybrid Discharges
	EX/1-6	Joffrin, EH	France	Physics and operational integrated controls for steady state scenario
Coffee Break				
IT/1 - ITER **16:40 - 18:45** 6x20'	IT/1-1	Holtkamp, N	ITER	The Engineering Challenges of ITER
	IT/1-2	Stambaugh, RD	United States of America	Review of ITER Physics Issues and Possible Approaches to Their Solution
	IT/1-3	Kamada, Y	Japan	Edge pedestal physics and its implications for ITER
	IT/1-4	Lipschultz, B	United States of America	Plasma-surface interaction, scrape-off layer and divertor physics: Implications for ITER
	IT/1-5	Costley, AE	ITER	The design and implementation of diagnostic systems on ITER
	IT/1-6	Gasparotto, MG	Germany	EUROPEAN Contribution to the Design and R&D Activities in View of the Start of the ITER Construction Phase

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OV/2 - Overview Magnetic Fusion **08:30 - 10:15** 4x25'	OV/2-1	Motojima, O	Japan	Extended Steady-State and High-Beta Regimes of Net-Current Free Heliotron Plasmas in the Large Helical Device
	OV/2-2	Gruber, Otto	Germany	Overview of ASDEX Upgrade Results
	OV/2-3	Lloyd, B	United Kingdom of Great Britain and Northen Ireland	Overview of Physics Results from MAST
	OV/2-4	Menard, JE	United States of America	Recent Physics Results from the National Spherical Torus Experiment
Coffee Break				
OV/3 - Overview Magnetic Fusion **10:45 - 12:30** 4x25'	OV/3-1	Chatelier, M	France	Integration of High Power, Long Pulse Operation in Tore Supra in Preparation for ITER
	OV/3-2	Scott, SDS	United States of America	Overview of Alcator C-Mod Research Program
	OV/3-3	Fasoli, AF	Switzerland	Overview of TCV Results
	OV/3-4	Romanelli, F	Italy	Overview of the FTU results
Lunch Break				
TH/1 EX/2 - Fluctuations 6x20'	TH/1-1	Scott, BD	Germany	Studies of the Tokamak Edge with Self Consistent Turbulence, Equilibrium, and Flows
	TH/1-2	Staebler, GM	United States of America	A Comprehensive Theory-Based Transport Model
	TH/1-3	Ernst, DR	United States of America	Identification of TEM Turbulence through Direct Comparison of Nonlinear Gyrokinetic Simulations with Phase Contrast Imaging Density Fluctuation Measurements
	EX/2-1	Conway, GD	Germany	Study of Turbulence and Radial Electric Field Transitions in ASDEX Upgrade using Doppler Reflectometry
	EX/2-2	Hoshino, K	Japan	Measurement and analysis of the fluctuations and poloidal flow on JFT-2M tokamak
	EX/2-3	Mckee, GR	United States of America	Characterization of Zonal Flows and Their Dynamics in the DIII-D Tokamak, Laboratory Plasmas, and Simulation
Coffee Break				
TH/2 - Transport Theory **16:40 - 18:45** 6x20'	TH/2-1	Candy, J	United States of America	Coupled ITG/TEM-ETG Gyrokinetic Simulations
	TH/2-2	Garbet, X	France	Beyond scale separation in gyrokinetic turbulence
	TH/2-3	Li, Jiquan	China, People's Rep.	Simulations on the nonlinear mode coupling in multiple-scale drift-type turbulence with coherent flow structures
	TH/2-4	Diamond, PH	United States of America	Progress in Understanding Multi-Scale Dynamics of Drift Wave Turbulence
	TH/2-5	Singh, R	India	Linear and nonlinear aspects of edge turbulence and transport in tokamaks
	TH/2-6Ra	Hahm, TS	United States of America	Gyrokinetic Studies of Nonlocal Properties of Turbulence-driven and Neoclassical Transport
	TH/2-6Rb	To rapp. Lee, WW	United States of America	Long Time Simulations of Microturbulence in Fusion Plasmas

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OV/4 - Overview Magnetic Fusion **08:30 - 10:15** 4x25'	OV/4-1	Yang, Qingwei	China, People's Rep.	Overview of HL-2A Experiment Results
	OV/4-2	Sanchez, J	Spain	Overview of TJ-II experiments
	OV/4-3	Kislov, DA	Russian Federation	Overview of T-10 Results
	OV/4-4	Fujisawa, A	Japan	Experimental Progress on Zonal Flow Physics in Toroidal Plasmas

Coffee Break

OV/5 - Overview Inertial Fusion reactors and Technology **10:45 - 12:30** 4x25'	OV/5-1	Mima, K	Japan	Recent Progress on FIREX Project and Related Fusion Researches at ILE, Osaka
	OV/5-2	Sangster, TC	United States of America	Overview of Inertial Fusion Research in the United States
	OV/5-3	Chen, L	United States of America	Theory of Alfvén waves and energetic particle physics in burning plasmas
	OV/5-4	Baluc, NL	Switzerland	Status of R&D Activities on Materials for Fusion Power Reactors

Lunch Break

EX/3 - Plasma Wall Interaction **14:00 - 16:10** 6x20'	EX/3-1	Pitts, RA	Switzerland	ELM transport in the JET scrape-off layer
	EX/3-2	Miyazawa, J	Japan	Density Regime of Complete Detachment and Operational Density Limit in LHD
	EX/3-3Ra	Dux, R	Germany	Tungsten as first Wall Material in ASDEX Upgrade
	EX/3-3Rb	To rapp. Schmid, KS	Germany	The Implications of High-Z First Wall Materials on Noble Gas Wall Recycling
	EX/3-4	Marmar, ES	United States of America	Operation of Alcator C-Mod with High-Z Plasma Facing Components with and without Boronization
	EX/3-5	Kirschner, A	Germany	Material erosion and redeposition during the JET MkIIGB-SRP divertor campaign
	EX/3-6	Loarer, Thierry	France	Gas Balance and Fuel Retention in Fusion Devices

Coffee Break

FT/1 - Fusion Technology **16:40 - 18:45** 6x20'	FT/1-1	Campbell, DJ	European Commission (EC)	Critical Physics Issues for Tokamak Power Plants
	FT/1-2	Maisonnier, DM	European Commission (EC)	Power Plant Conceptual Studies in Europe
	FT/1-3	Matsui, H	Japan	Next Phase Activity of the International Fusion Materials Irradiation Facility under a New Framework
	FT/1-4Ra	Petersen, C	Germany	Mechanical Properties of Reduced Activation Ferritic/Martensitic Steels after European Reactor Irradiations
	FT/1-4Rb	To rapp. Tanigawa, H	Japan	Status and Key Issues of Reduced Activation Martensitic Steels as the Structural Materials of ITER Test Blanket Module and Beyond
	FT/1-5	Durocher, Alain	France	Advanced Qualification Methodology for Actively Cooled High Heat Flux Plasma Facing Components
	FT/1-6	Wukitch, SJ	United States of America	Alcator C-Mod Ion Cyclotron Antenna Performance

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OV/6 IF/1 - Inertial Fusion **08:30 - 10:15** 1x25' 3x20'	OV/6-1	Zhang, WY (25')	China, People's Rep.	Status of Inertial Fusion Energy Program in China
	IF/1-1	Azechi, H	Japan	Compression and Fast Heating of Liquid Deuterium Targets in FIREX Program
	IF/1-2Ra	Mackinnon, AJ	United States of America	Studies of electron and proton isochoric heating for fast ignition
	IF/1-2Rb	To rapp. Kodama, R	Japan	Plasma Photonic Devices for Fast Ignition Concept in Laser Fusion Research
	IF/1-2Rc	To rapp. Tanaka, K	Japan	Relativistic Electron Generation and Its Behaviors Relevant to Fast Ignition
	IF/1-3	Grabovski, EV	Russian Federation	Radiating Z-pinch Investigation and "BAIKAL" Project for ICF

Coffee Break

EX/4 - NTM/Disruptions **10:45 - 12:30** 5x20'	EX/4-1Ra	Isayama, A	Japan	Active Control of Neoclassical Tearing Modes toward Stationary High-Beta Plasmas in JT-60U
	EX/4-1Rb	To rapp. Zohm, H	Germany	Control of MHD Instabilities by ECCD: ASDEX Upgrade Results and Implications for ITER
	EX/4-2	Prater, R	United States of America	Prevention of the 2/1 Neoclassical Tearing Mode in DIII-D
	EX/4-3	Granetz, RS	United States of America	Gas Jet Disruption Mitigation Studies on Alcator C-Mod and DIII-D
	EX/4-4 (theory)	Morozov, DKh	Russian Federation	Influence of plasma opacity on current decay after disruptions in tokamaks
	EX/4-5Ra	Khimchenko, LN	Russian Federation	Study of erosion products in experiments simulating ELMs and disruptions in ITER on plasma gun QSPA-facility
	EX/4-5Rb	To rapp. Linke, J	Germany	Material Damage Characterisation of Divertor Targets Exposed to ITER-Relevant Type I ELM and Disruption Transient Loads
	EX/4-5Rc	To rapp. Bazylev, BN	Germany	Modelling of Material Damage of CFC and W Macro-Brush Divertor Targets under ELMs and Disruptions at Plasma Gun Facilities and Prediction for ITER
	EX/4-5Rd	To rapp. Landman, IS	Germany	Modelling of ITER Edge Plasma Dynamics Following Type I ELMs and Consequences for Tokamak Operation

Lunch Break

EX/5 - 3D Effects on Transport **14:00 - 16:10** 6x20'	EX/5-1	Urano, H	Japan	Enhanced H-mode pedestal and energy confinement by reduction of toroidal field ripple in JT-60U
	EX/5-2	Canik, JM	United States of America	Reduction of Neoclassical Transport and Observation of a Fast Electron Driven Instability with Quasisymmetry in HSX
	EX/5-3	Yokoyama, M	Japan	Core Electron-Root Confinement (CERC) in Helical Plasmas
	EX/5-4 (theory)	Watanabe, T-H	Japan	Gyrokinetic Theory and Simulation of Zonal Flows and Turbulence in Helical Systems
	EX/5-5Ra	Sano, Fumimichi	Japan	Configuration Control Studies of Heliotron J
	EX/5-5Rb	To rapp. Okamura, S	Japan	Progress of Confinement Physics Study in Compact Helical System
	EX/5-6	Tamura, N	Japan	Impact of Nonlocal Electron Heat Transport on the High Temperature Plasmas of LHD

Coffee Break

EX/6 TH/3 - Energetic Particles **16:40 - 18:45** 6x20'	EX/6-1	Günter, S	Germany	Fast Particle Physics on ASDEX Upgrade
	EX/6-2	Ishikawa, M	Japan	Confinement Degradation of Energetic Ions due to Alfvén Eigenmodes in JT-60U Negative-Ion-Based Neutral Beam Injection Plasmas
	EX/6-3	Heidbrink, WW	United States of America	Alfven Instabilities in DIII-D: Fluctuation Profiles, Thermal-Ion Excitation, and Fast-Ion Transport
	TH/3-1	Berk, HL	United States of America	Interpretation of Mode Frequency Sweeping in JET and NSTX
	TH/3-2	Zonca, F	Italy	Electron fishbones: theory and experimental evidence
	EX/6-4	Suzuki, T	Japan	Off-axis Current Drive and Current Profile Control in JT-60U

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FT/2 - New Machines **08:30 - 10:15** 5x20'	FT/2-1	Saxena, YC	India	SST-1 Commissioning and First Plasma Results
	FT/2-2	Yang, HL	Korea, Republic of	KSTAR Assembly
	FT/2-3	Haange, R	Germany	Experience gained during fabrication and construction of Wendelstein 7-X
	FT/2-4	Neilson, GH	United States of America	Progress in the Construction of NCSX
	FT/2-5	Kikuchi, M	Japan	Overview of Modification of JT-60U for the Satellite Tokamak Program

Coffee Break

EX/7 - MHD Stability **10:45 - 12:30** 5x20'	EX/7-1Ra	Garofalo, AM	United States of America	Active Control of Resistive Wall Modes in High Beta, Low Rotation DIII-D Plasmas
	EX/7-1Rb	To rapp. Takechi, M	Japan	Plasma Rotation and Wall effects on Resistive Wall Mode in JT-60U
	EX/7-2Ra	Pinches, SD	United Kingdom of Great Britain and Northen Ireland	MHD Studies in MAST
	EX/7-2Rb	To rapp. Sontag, AC	United States of America	Investigation of Resistive Wall Mode Stabilization Physics in High Beta Plasmas Using Applied Non-axisymmetric Fields in NSTX
	EX/7-3	Martini, S	Italy	Overview of RFX-mod results with active MHD control
	EX/7-4Ra (theory)	Porcelli, F	Italy	Integrated modelling of sawtooth oscillations in tokamak plasmas
	EX/7-4Rb	To rapp. Fu, GY	United States of America	Nonlinear Simulations of Fishbone Instability and Sawteeth in Tokamaks and Spherical Torus
	EX/7-5	Sakakibara, S	Japan	Stability in High-Beta Plasmas of LHD

Lunch Break

EX/8 - Particle and Energy Transport **14:00 - 16:10** 6x20'	EX/8-1	Ohyabu, N	Japan	Super Dense Core Plasma due to Internal Diffusion Barrier in LHD
	EX/8-2	Den Hartog, DJ	United States of America	Overview of Results in the MST Reversed-Field Pinch Experiment
	EX/8-3	Giroud, C	United Kingdom of Great Britain and Northen Ireland	Progress in understanding anomalous impurity transport at JET
	EX/8-4	Weisen, H	Switzerland	Peaked Density Profiles in Low Collisionality H-modes in JET, ASDEX Upgrade and TCV
	EX/8-5Ra (theory)	Jenko, F	Germany	Microturbulence in Magnetic Fusion Devices: New Insights from Gyrokinetic Simulation and Theory
	EX/8-5Rb	To rapp. Angioni, C	Germany	Theoretical Understanding of Core Transport Phenomena in ASDEX Upgrade
	EX/8-6	Kaye, SM	United States of America	Confinement and Local Transport in the National Spherical Torus Experiment (NSTX)

Coffee Break

EX/9 TH/4 - ELMs **16:40 - 18:45** 6x20'	EX/9-1	Kirk, A	United Kingdom of Great Britain and Northen Ireland	Evolution of the pedestal on MAST and the implications for ELM power loadings
	EX/9-2	Asakura, N	Japan	ELM Propagation and Fluctuations Characteristics in H- and L-mode SOL Plasmas on JT-60U
	TH/4-1Ra	Snyder, PB	United States of America	Stability and Dynamics of the Edge Pedestal in the Low Collisionality Regime: Physics Mechanisms for Steady-State ELM-Free Operation
	TH/4-1Rb	To rapp. Wilson, HR	United Kingdom of Great Britain and Northen Ireland	ELM crash theory: Relaxation, filamentation, explosions and implosions
	TH/4-2	Hayashi, N	Japan	Integrated Simulation of ELM Energy Loss Determined by Pedestal MHD and SOL Transport
	EX/9-3	Moyer, RA	United States of America	Edge Localized Mode Control in DIII-D Using Magnetic Perturbation-Induced Pedestal Transport Changes
	EX/9-4	Finken, KH	Germany	Influence of the Dynamic Ergodic Divertor on TEXTOR Discharges

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21-Oct-06

IT/2 - ITER Systems **08:30 - 10:15** 4x20'	IT/2-1Ra	Libeyre, P	France	New results and remaining issues in superconducting magnets for ITER and associated R&D in Europe
	IT/2-1Rb	To rapp. Okuno, K	Japan	Technology Development for the Construction of ITER Superconducting Magnet System
	IT/2-2	Janeschitz, GA	Germany	High Temperture Superconductors for Future Fusion Magnet Systems - Status, Prospects and Challenges
	IT/2-3Ra	Hanada, M	Japan	Production of High Power and Large-Area Negative Ion Beams for ITER
	IT/2-3Rb	To rapp. Antoni, V	Italy	Technological aspects of the different schemes for accelerator and ion source of the ITER Neutral Beam Injector
	IT/2-3Rc	To rapp. Franzen, Peter	Germany	Progress of the development of the IPP RF Negative Ion Source for the ITER Neutral Beam System
	IT/2-3Rd	To rapp. Bonicelli, Tullio	Germany	Review of the EU Activities in Preparation of ITER
	IT/2-4Ra	Piosczyk, B	Germany	170 GHz, 2 MW, CW Coaxial Cavity Gyrotron for ITER - status and experimental results
	IT/2-4Rb	To rapp. Litvak, AG	Russian Federation	Development in Russia of High Power Gyrotrons for Fusion
	IT/2-4Rc	To rapp. Sakamoto, K	Japan	Development of the 170GHz Gyrotron and Equatorial Launcher for ITER
	IT/2-4Rd	To rapp. Erckmann, V	Germany	The 140 GHz, 10 MW, CW ECRH Plant for W7-X: A Training Field for ITER
	IT/2-4Re	To rapp. Gantenbein, Gerd	Germany	Experimental Results of the 1-MW, 140-GHz, CW Gyrotron for W7-X

Coffee Break

IT/2 PD - ITER, Post-Deadline **10:45 - 12:30** 5x20'	IT/2-5	Beaumont, B	France	Progress Towards Steady State Systems For Fusion Devices
	IT/2-6	Humphreys, DA	United States of America	Development of ITER-Relevant Plasma Control Solutions at DIII-D
	PD-1			
	PD-2			
	PD-3			

Lunch Break

S/1 - Summary **14:00 - 16:10** 3x30'				

Coffee Break

S/1 - Summary(cont.) / CLOSING **16:40 - 18:00** 2x30'	**CLOSING**	Lackner, K / IAEA		(20')

Statistics	OV/P	P1	P2	P3	P4	P5	P6	P7	P8
SUB-TOTALS	24	58	65	49	55	68	63	55	52
OVs all week		24	24	24	24	24	24	24	24
SESSION TOTALS	**24**	**82**	**89**	**73**	**79**	**92**	**87**	**79**	**76**
	OV/1-1	EX/1-1	TH/2-1	TH/P3-1	EX/3-1	FT/1-1	EX/6-1	FT/2-1	EX/9-1
	OV/1-2	EX/1-2	TH/2-2	TH/P3-2	EX/3-2	FT/1-2	EX/6-2	FT/2-2	EX/9-2
	OV/1-3	EX/1-3	TH/2-3	TH/P3-3	EX/3-3Ra	FT/1-3	EX/6-3	FT/2-3	TH/4-1Ra
	OV/1-4	EX/1-4	TH/2-4	TH/P3-4	EX/3-3Rb	FT/1-4Ra	TH/3-1	FT/2-4	TH/4-1Rb
	OV/2-1	EX/1-5	TH/2-5	TH/P3-5	EX/3-4	FT/1-4Rb	TH/3-2	FT/2-5	TH/4-2
	OV/2-2	EX/1-6	TH/2-6Ra	TH/P3-6	EX/3-5	FT/1-5	EX/6-4	FT/P7-1	EX/9-3
	OV/2-3	EX/P1-1	TH/2-6Rb	TH/P3-7	EX/3-6	FT/1-6	PD-1	FT/P7-2	EX/9-4
	OV/2-4	EX/P1-2	TH/P2-1	TH/P3-8	TH/1-1	FT/P5-1	PD-2	FT/P7-3	EX/4-1Ra
	OV/3-1	EX/P1-3	TH/P2-2	TH/P3-9	TH/1-2	FT/P5-2	PD-3	FT/P7-4	EX/4-1Rb
	OV/3-2	EX/P1-4	TH/P2-3	TH/P3-10	TH/1-3	FT/P5-3	EX/P6-1	FT/P7-5	EX/4-2
	OV/3-3	EX/P1-5	TH/P2-4	TH/P3-11	EX/2-1	FT/P5-4	EX/P6-2	FT/P7-6	EX/4-3
	OV/3-4	EX/P1-6	TH/P2-5	TH/P3-12	EX/2-2	FT/P5-5	EX/P6-3	FT/P7-7	EX/4-4 (theory)
	OV/4-1	EX/P1-7	TH/P2-6	TH/P3-13	EX/2-3	FT/P5-6	EX/P6-4	FT/P7-8	EX/4-5Ra
	OV/4-2	EX/P1-8	TH/P2-7	TH/P3-14	EX/P4-1	FT/P5-7	EX/P6-5	FT/P7-9	EX/4-5Rb
	OV/4-3	EX/P1-9	TH/P2-8	TH/P3-15	EX/P4-2	FT/P5-8	EX/P6-6	FT/P7-10	EX/4-5Rc
	OV/4-4	EX/P1-10	TH/P2-9	TH/P3-16	EX/P4-3	FT/P5-9	EX/P6-7	FT/P7-11	EX/4-5Rd
	OV/5-1	EX/P1-11	TH/P2-10	TH/P3-17	EX/P4-4	FT/P5-10	EX/P6-8	EX/5-1	EX/7-1Ra
	OV/5-2	EX/P1-12	TH/P2-11	TH/P3-18	EX/P4-5	FT/P5-11	EX/P6-9	EX/5-2	EX/7-1Rb
	OV/5-3	EX/P1-13	TH/P2-12	TH/P3-19	EX/P4-6	FT/P5-12	EX/P6-10	EX/5-3	EX/7-2Ra
	OV/5-4	EX/P1-14	TH/P2-13	TH/P3-20	EX/P4-7	FT/P5-13	EX/P6-12	EX/5-4 (theory)	EX/7-2Rb
	OV/6-1	EX/P1-15	TH/P2-14	EX/8-1	EX/P4-8	FT/P5-14	EX/P6-13	EX/5-5Ra	EX/7-3
	OV/P-1	EX/P1-16	TH/P2-15	EX/8-2	EX/P4-9	FT/P5-15	EX/P6-14	EX/5-5Rb	EX/7-4Ra (theory)
	OV/P-2	EX/P1-17	TH/P2-16	EX/8-3	EX/P4-10	FT/P5-16	EX/P6-15	EX/5-6	EX/7-4Rb
	OV/P-3	IT/1-1	TH/P2-17	EX/8-4	EX/P4-11	FT/P5-17	EX/P6-16	EX/P7-1	EX/7-5
		IT/1-2	TH/P2-18	EX/8-5Ra (theory)	EX/P4-12	FT/P5-18	EX/P6-17	EX/P7-2	EX/P8-1
		IT/1-3	TH/P2-19	EX/8-5Rb	EX/P4-13	FT/P5-19	EX/P6-18	EX/P7-3	EX/P8-2
		IT/1-4	TH/P2-20	EX/8-6	EX/P4-14	FT/P5-20	EX/P6-19	EX/P7-4	EX/P8-3
		IT/1-5	TH/P2-21	EX/P3-1	EX/P4-15	FT/P5-21	EX/P6-20	EX/P7-5	EX/P8-4
		IT/1-6	TH/P2-22	EX/P3-2	EX/P4-16	FT/P5-22	EX/P6-21	EX/P7-6	EX/P8-5
		IT/P1-1	TH/P2-23	EX/P3-3	EX/P4-17	FT/P5-23	EX/P6-22	EX/P7-7	EX/P8-6
		IT/P1-2	TH/P2-24	EX/P3-4	EX/P4-18	FT/P5-24	EX/P6-23	EX/P7-8	EX/P8-7
		IT/P1-4	SE/P2-1	EX/P3-5	EX/P4-19	FT/P5-25	TH/P6-1	EX/P7-9	EX/P8-8
		IT/P1-5	SE/P2-2	EX/P3-6	EX/P4-20	FT/P5-26	TH/P6-2	EX/P7-10	EX/P8-9
		IT/P1-6	SE/P2-3	EX/P3-7	EX/P4-21	FT/P5-27	TH/P6-3	EX/P7-11	EX/P8-10
		IT/P1-7	IT/2-1Ra	EX/P3-8	EX/P4-22	FT/P5-28	TH/P6-4	EX/P7-12	EX/P8-11
		IT/P1-8	IT/2-1Rb	EX/P3-9	EX/P4-23	FT/P5-29	TH/P6-5	EX/P7-13	EX/P8-12
		IT/P1-9	IT/2-2	EX/P3-10	EX/P4-24	FT/P5-30	TH/P6-6	EX/P7-14	EX/P8-13
		IT/P1-10	IT/2-3Ra	EX/P3-11	EX/P4-25	FT/P5-31	TH/P6-7	TH/P7-1	EX/P8-14
		IT/P1-11	IT/2-3Rb	EX/P3-12	EX/P4-26	FT/P5-32	TH/P6-8	TH/P7-2	EX/P8-15
		IT/P1-12	IT/2-3Rc	EX/P3-13	EX/P4-27	FT/P5-33	TH/P6-9	TH/P7-3	EX/P8-16
		IT/P1-13	IT/2-3Rd	EX/P3-14	EX/P4-28	FT/P5-34	TH/P6-10	IC/P7-1	EX/P8-17
		IT/P1-14	IT/2-4Ra	EX/P3-15	EX/P4-29	FT/P5-35	TH/P6-11	IC/P7-2	EX/P8-18
		IT/P1-15	IT/2-4Rb	EX/P3-16	EX/P4-30	FT/P5-36	TH/P6-12	IC/P7-3	EX/P8-19
		IT/P1-16	IT/2-4Rc	EX/P3-17	EX/P4-31	FT/P5-37	TH/P6-13	IC/P7-4	EX/P8-20
		IT/P1-17	IT/2-4Rd	EX/P3-18	EX/P4-32	FT/P5-38	TH/P6-14	IC/P7-5	EX/P8-21
		IT/P1-18	IT/2-4Re	EX/P3-19	EX/P4-33	FT/P5-39	TH/P6-15	IC/P7-6	TH/P8-1
		IT/P1-19	IT/2-5	EX/P3-20	EX/P4-34	FT/P5-40	TH/P6-16	IC/P7-7	TH/P8-2
		IT/P1-20	IT/2-6	EX/P3-21	EX/P4-35	FT/P5-41	TH/P6-17	IC/P7-8	TH/P8-3
		IT/P1-21	IT/P2-1	EX/P3-22	EX/P4-36	FT/P5-42	TH/P6-18	IC/P7-9	TH/P8-4
		IT/P1-22	IT/P2-2		EX/P4-37	IF/1-1	TH/P6-19	IC/P7-10	TH/P8-5
		IT/P1-23	IT/P2-3		EX/P4-38	IF/1-2Ra	TH/P6-20	IC/P7-11	TH/P8-6
		IT/P1-24	IT/P2-4		EX/P4-39	IF/1-2Rb	TH/P6-21	IC/P7-12	
		IT/P1-25	IT/P2-5		EX/P4-40	IF/1-2Rc	TH/P6-22	IC/P7-13	
		IT/P1-26	IT/P2-6		EX/P4-41	IF/1-3	TH/P6-23	IC/P7-14	
		IT/P1-27	IT/P2-7		EX/P4-42	IF/P5-1	TH/P6-24	IC/P7-15	
		IT/P1-28	IT/P2-8			IF/P5-2	TH/P6-25		
		IT/P1-29	IT/P2-9			IF/P5-3	PD/P6-1		
		IT/P1-30	IT/P2-10			IF/P5-4	PD/P6-2		
			IT/P2-11			IF/P5-5	PD/P6-3		
			IT/P2-12			IF/P5-6	PD/P6-4		
			IT/P2-13			IF/P5-7	PD/P6-5		
			IT/P2-14			IF/P5-8	PD/P6-6		
			IT/P2-15			IF/P5-9	PD/P6-7		
			IT/P2-16			IF/P5-10			
			IT/P2-17			IF/P5-11			
						IF/P5-12			
						IF/P5-13			
						IF/P5-14			