AGENDA OF SESSIONS

Monday, September 21, 2009

08:45-09:00	Opening **I. Vyshnevskyj (KINR), G. Mank (IAEA)**		

Session 1: Transport of fast ions 8:45-10:45 Chair: H. Berk

09:00-09:40	IT-1	**D. Pace**	USA
	Observation of energetic ion transport due to microturbulence and comparison with gyrokinetic simulations		
09:40-10:05	OT-1	**S. Günter**	Germany
	Turbulent transport of energetic particles		
10:05-10:45	IT-2	**E.D. Fredrickson**	USA
	Modeling fast ion transport in TAE avalanches in NSTX		
10:45-11:05	**COFFEE BREAK**		

Session 2: Fast ions in ITER 11:05-12:25 Chair: K. Shinohara

11:05-11:45	IT-3	**S. Putvinski**	ITER
	Energetic particle issues for ITER design and operation – update on ITER construction		
11:45-12:25	IT-4	**M. Albergante**	Swizerland
	Microturbulence-driven transport of energetic ions in the ITER steady-state scenario		
12:25-14:00	**LUNCH**		

Poster Session 1 14:00-15:30

	P1	**Yu.V. Yakovenko**	Ukraine
	Mode Coupling and Decay Phenomena in Alfvén Instabilities		
	P2	**Ya.I. Kolesnichenko**	Ukraine
	Drift-Alfvén and drift-sound instabilities in stellarators and tokamaks		

P3 **V.V. Lutsenko** Ukraine
Fishbone mode in compressible plasmas

P4 **V.V. Lutsenko** Ukraine
Resistive wall damping of Alfvén eigenmodes

P5 **Herbert L. Berk** USA
Geodesic Acoustic Modes Induced by Energetic Particles

P6 **R. Nyqvist** Sweden
Alfvénic Eigenmodes within the q=1 Radius in Sawtoothing Plasmas

P7 **T. Ito** Japan
Measurement of Stable low-n Toroidal Alfvén Eigenmodes by Application of Magnetic Perturbations in the Compact Helical System

P8 **G.J. Kramer** USA
Full-orbit studies of Alfvén eigenmode induced fast-ion losses in DIII-D

P9 **V.S. Marchenko** Ukraine
Plasma pressure effect on multiple low-shear toroidal Alfvén eigenmodes

P10 **Z. O. Guimarães-Filho** France
Evolution of the electron fishbone-like mode localization during frequency jumps on Tore Supra

P11 **O.P. Fesenyuk** Ukraine
Theory of generation of kinetic Alfvén waves by non-conventional global Alfvén eigenmodes

P12 **V. Yavorskij** Austria
The Impact of Fusion Alphas on Burning Plasmas in Tokamak

P13 **K. Schoepf** Austria
Fast Ion Source From Neutral Beam Injection in Tokamak Plasmas

P14 **V.V. Plyusnin** Portugal
Enhancement of metal impurities release due to fast ions loss in JET

P15 **G.M.El-Aragi** Egypt
Ion Beam Emission within a Low Energy Focus Plasma (0.1kJ) Operating with hydrogen

P16 **Faridah Mohamad Idris** Malaysia
Kinematic of Charged Particles in Magnetic Field

P17 **M. Isobe** Japan
Initial fast-particle-experiment in HL-2A tokamak

P18 **L. Jakubowski** Poland
A Detection Method for Direct Measurements of Fast Electrons via Cherenkov Effect in the ISTTOK Tokamak

P19 **M. Gatu Johnson** Sweden
Neutron emission levels during the ITER zero-activation phase

P20 **M. Khan** Austria
Fractional diffusion model for fast ions in MHD-mode perturbed plasmas

P21 **T. Ozaki** Japan
Helium Neutral Particle from the Helium Plasma in Large Helical Device

P22 **O. S. Burdo** Ukraine
Precession of energetic ions in tokamaks with non-circular cross-section and high β

P23 **Yu. Moskvitina** Ukraine
Fokker-Planck Description of TF Ripple Induced Collisional Transport of Fast Ions in Tokamaks

P24 **M. Tyshchenko** Ukraine
Transformations of kinetic Alfvén waves in toroidal plasmas

P25 **G. Vlad** Italy
Toward a New Hybrid MHD Gyrokinetic Code: Progresses and Perspectives

15:30-15:50 **COFFEE BREAK**

Session 3: Nonlinear phenomena 15:50-18:25 Chair: W. Heidbrink

15:50-16:30 IT-5 **M. Osakabe** Japan
Clump and hole formation in the energetic particle spectra by the toroidicity induced Alfvén eigenmodes and their behaviors during the mode activities

16:30-17:10 IT-6 **B. Breizman** USA
Nonlinear travelling waves in energetic particle phase space

17:10-17:35 OT-2 **Y. Todo** Japan
Interaction of energetic particles, Alfvén eigenmode, and zonal flow and fields

17:35-18:00	OT-3	**C. Nguyen**	France
	Linear and nonlinear stability of Beta Alfvén Eigenmodes		
18:00-18:25	OT-4	**M. García-Muñoz**	Germany
	Fast-Ion Channelling in Phase-Space by Alfvén-Eigenmodes		
19:00	**RECEPTION**		

Tuesday, September 22, 2009

Session 4: Transport processes 9:00-11:05 Chair: R. Nazikian

09:00-09:40 IT-7 **N. Gorelenkov** USA
Anomalous electron transport due to high frequency beam ion diven global Alfvén eigenmodes

09:40-10:20 IT-8 **Ya. Kolesnichenko** Ukraine
Effects of the energetic-ion-induced instabilities on the electron heat transport in toroidal plasmas

10:20-10:45 OT-5 **D. Darrow** USA
Loss of Fast Ions from NSTX Plasmas Due to TAE Avalanches and EPM Bursts

10:45-11:05 **COFFEE BREAK**

Session 5: Instabilities in 3D geometry 11:05-12:20 Chair: S. Günter

11:05-11:30 OT-6 **K. Toi** Japan
Reversed Shear Alfvén Eigenmodes and Geodesic Acoustic Mode in Reversed Magnetic Shear Configuration with Negative Concavity on the Large Helical Device

11:30-11:55 OT-7 **D. Spong** USA
Stability analysis for fast ion driven instabilities in stellarators using a particle/wave transfer approach

11:55-12:20 OT-8 **V. Marchenko** Ukraine
Excitation of the beta-induced Alfvén eigenmodes by a magnetic island

12:20-14:00 **LUNCH**

Poster Session 2 14:00-15:30

P26 **A. Mishchenko** Germany
Global particle-in-cell simulations of Alfvénic modes

P27 **M. K. Lilley** UK
Destabilising Effect of Dynamical Friction on Fast-Particle-Driven Waves

P28 **T. Fehér** Germany
Numerical study of the interaction between Alfvén waves and fast particles

P29 **M. Brüdgam** Germany
The virtual Fast-Ion Loss Detector

P30 **A. Könies** Germany
A computational approach to continuum damping of Alfvén waves in two and three-dimensional geometry

P31 **T. Kurki-Suonio** Finland
Realistic simulations of ITER fast ion wall loads including effects due to finite Larmor radius and microturbulence

P32 **Z. Lin** USA
Destabilising Effect of Dynamical Friction on Fast-Particle-Driven Waves

P33 **S.E. Sharapov** UK
Confinement and loss of fusion products in fast ion D-He^3 and D-D fusion experiments on JET

P34 **V. Goloborod'ko** Austria
Fokker-Planck Modelling of NBI Generated Deuterons in Tokamaks

P35 **I. Holod** USA
Gyrokinetic Simulation of Energetic Particle Instability

P36 **C.M. Muscatello** USA
Fast Ion Transport due to the Sawtooth Collapse in the DIII-D tokamak

P37 **F. Nabais** Portugal
Fast ion redistribution and losses in Advanced Tokamak Scenario

P38 **K. Hamamatsu** Japan
Radial transport effects of alpha particles on a burning plasma

P39 **T. Gassner** Austria
Redistribution of tritium beam ions in JET plasmas with fishbones

P40 **A.V. Tykhyy** Ukraine
Stochastic diffusion of energetic ions in Wendestein-type configurations

P41 **W.W. Heidbrink** USA

Phenomenology of beam-ion loss from the DIII-D tokamak

P42 **W.W. Heidbrink** USA
Fast-ion D-alpha measurements of energetic ion behavior in NSTX

P43 **C.Perez von Thun** Germany
MeV range fast ion losses induced by fishbones on JET

P44 **W.W. Heidbrink** USA
Direct Measurements of Wave-Particle Interactions in the Large Plasma Device

P45 **T. Panis** Switzerland
Optimization of the active MHD spectroscopy system on JET for the excitation of individual intermediate and high-n Alfvén eigenmodes

P46 **A.N. Sekar Iyengar** India
Wavelet based multifractal analysis of fluctuations in runaway dominated discharges in the SINP tokamak

P47 **D.Testa** Switzerland
Measurement of the Damping Rate of High-n Toroidal Alfvén Eigenmodes in JET

P48 **R. Khan** Pakistan
Nonlinear Simulation of MHD Instabilities in Tokamak Plasmas

P49 **D.L. Grekov** Ukraine
Helium ash removal from Helias reactor

P50 **S.V. Kasilov** Ukraine
Passing alpha particle orbits in presence of resonant magnetic field perturbations shielded by the plasma

15:30-15:50 **COFFEE BREAK**

Session 6: Diagnostic & measurements 15:50-18:25 Chair: A. Fasoli

15:50-16:30 IT-9 **V. Kiptily** UK
Doppler broadening of gamma ray lines and fast ion distribution in JET plasmas

16:30-17:10 IT-10 **C. Hellesen** Sweden
Measurements of fast ions and their interactions with MHD activity using neutron emission spectroscopy

17:10-17:35 OT-9 **M. Van Zeeland** USA

	Visible Imaging of Internal MHD, the Fast Ion Profile and Injected Neutrals in the DIII-D Tokamak		
17:35-18:00	OT-10	**K. Ogawa**	Japan
	Measurement of Fast Ion losses Induced by Toroidal Alfvén Eigenmode in the Large Helical Device		
18:00-18:25	OT-11	**S. Pinches**	UK
	Fast Ion Driven Instabilities in MAST		
19:30	**CONFERENCE DINNER**		

Wednesday, September 23, 2009

Session 7: Low frequency modes 9:00-11:10 Chair: K. Toi

09:00-09:40	IT-11	**R. Nazikian**	USA
	Global geodesic acoustic modes driven by energetic particles in the DIII-D tokamak		
09:40-10:05	OT-12	**G. Fu**	USA
	Energetic Particle-induced Geodesic Acoustic Mode: Linear Theory and Nonlinear Simulations		
10:05-10:45	IT-12	**K. Shinohara**	Japan
	Energetic particle driven instability in the wall-stabilized high-β plasmas		
10:45-11:10	OT-13	**Ph. Lauber**	Germany
	Low frequency kinetic Alfvén Eigenmodes at ASDEX-Upgrade		
11:10-11:30	**COFFEE BREAK**		

Session 8: Effects of fast electrons 11:30-12:45 Chair: S. Sharapov

11:30-11:55	OT-14	**M. Isobe**	Japan
	Energetic-particle modes driven by suprathermal electrons in helical devices CHS and LHD		
11:55-12:20	OT-15	**T. Fehér**	Germany
	Simulation of runaway electron generation during plasma shutdown by impurity injection		
12:20-12:45	OT-16	**W. Chen**	China
	The features of ion and electron fishbone instabilities on HL-2A		
12:45-14:15	**LUNCH**		

Summary Session 14:15-16:00 Chair: Ya. Kolesnichenko

14:15-14:45	Theory	**Ph. Lauber**	Germany
14:45-15:15	Experiment	**M. Van Zeeland**	USA
15:15-16:00	Discussion		
16:00	**CLOSING**	**G. Mank**	IAEA
	COFFEE		