

PET15 Program Outline

	9/09	9/10	9/11
9:00	Registration	I-03: G. Kawamura	I-05: H. Bufferand
9:15			
9:30	Opening		
9:45	I-01: W. Stacey	O-07: V. Rozhansky	O-11: G. Telesca*
10:00			
10:15		O-08: Y. Marandet	Coffee break
10:30	Coffee break		Poster-2
10:45	O-01: K. Itoh	Coffee break	
11:00			
11:15	O-02: C. Baudoin	I-04: J. Cheng	
11:30			
11:45	O-03: I. Joseph	O-09: L. Chôné	
12:00			
12:15	Lunch	O-10: A. Kukushukin	Lunch
12:30			
12:45		Lunch with lunchbox	
13:00			
13:15			
13:30		Excursion	
13:45			
14:00	I-02: B. Scott		I-06: R. Doerner
14:15			
14:30	O-04: P. Tamain		O-12: A. Kirschner
14:45			
15:00	O-05: R. Fattersack		O-13: S. Wiesen
15:15			
15:30	O-06: R. Cohen		O-14: H. Ohtani
15:45			
16:00	Coffee break		Coffee break
16:15	Poster-1		Closing
16:30			
16:45			
17:00			
17:15			
17:30			
17:45			
18:00			
18:15			
18:30			
18:45			
19:00		Banquet	
19:15			
19:30			
19:45			
20:00			
20:15			
20:30			
20:45			

Invited and Oral Talks

Paper No	Speaker	Institution	Title
I-01	W. Stacey	Georgia Tech	Theory of Non-Diffusive and No-Axisymmetric Transport in the Edge Pedestal of Tokamaks
O-01	K. Itoh	NIFS	On the origin of steep radial electric field in the transport barrier at plasma edge
O-02	C. Baudoin	CEA Cadarache	On the effect of electron temperature fluctuations on edge heat and particle turbulent transport
O-03	I. Joseph	LLNL	Efficient Connection of Collisionless Landau Fluid to Collisional Braginskii Fluid Plasma Physics Models
I-02	B. Scott	Max-Planck-IPP	Gyrokinetic Theory and Dynamics of the Tokamak Edge
O-04	P. Tamain	CEA Cadarache	Interplay between plasma turbulence and particle injection in 3D global turbulence simulations
O-05	R. Futtersack	CEA Cadarache	First principle modelling of the interplay between Langmuir probes and edge plasma turbulence
O-06	R. Cohen	CompX	Plasma edge simulation with the continuum kinetic code COGENT
I-03	G. Kawamura	NIFS	Three-dimensional transport analysis of plasma, neutrals and impurities in LHD peripheral regions with impurity gas-puff
O-07	V. Rozhansky	St. Petersburg SPU	Modeling of ITER edge plasma in the presence of resonant magnetic perturbations
O-08	Y. Marandet	Aix-Marseille U	Effect of statistical noise on coupled plasma fluid – Monte Carlo kinetic neutrals simulations: investigation based on artificial noise
I-04	J. Cheng	SWIP	Roles of turbulence and pressure gradient driven flows in triggering the L-I-H transitions on HL-2A tokamak
O-09	L. Chôné	Aix-Marseille U	Transport barrier formation in edge turbulence simulation with neoclassical poloidal flow damping
O-10	A. Kukushkin	Kurchatov Institute	Role of “momentum removal” in divertor detachment
I-05	H. Bufferand	Aix-Marseille U	Self-consistent transport in SOLEDGE2D edge plasma modeling
O-11	G. Telesca (to be presented by R. Zagorski)	Ghent University	Core-SOL modelling of neon seeded JET discharges with the ITER-like wall
I-06	R. Doerner	UCSD	Outstanding issues in plasma-surface interaction research
O-12	A. Kirschner	Forschungszentrum Jülich	Modelling of impurity transport and plasma-wall interaction in fusion devices with the ERO code: basics of the code and examples of application
O-13	S. Wiesen	Forschungszentrum Jülich	Effect of PFC recycling conditions on JET pedestal density dynamics
O-14	H. Ohtani	NIFS	Visualization of dust particle data with plasma simulation results by virtual-reality system

Poster 1

Paper No	Presenter	Institution	Title
P1-01	Y. Nishimura	Cheng Kung U	Topological effects of tokamak divertor geometry on particle transport in the presence of magnetic stochasticity
P1-02	C.-C. Chang	Kyoto U	Effects of magnetic islands on ECCD driven supra-thermal electron behaviors and current profiles in the tokamak plasma
P1-03	R. Kanno	NIFS	Development of a drift-kinetic simulation code for estimating collisional transport affected by RMPs and radial electric field
P1-04	N. Miyato	JAEA	Gyrokinetic model beyond the standard ordering
P1-05	G. Fuhr	Aix-Marseille U	Self consistent turbulence response to RMPs and tearing modes
P1-06	S.-I. Itoh	Kyushu U	On Immediate Influence of Source Input on Edge-Core Coupling
P1-07	I. Katanuma	U Tsukuba	Particle simulation on blob production in an open system
P1-08	Y. Kosuga	Kyushu U	Turbulence dynamics with the coupling of density gradient and parallel velocity gradient in the edge plasmas
P1-09	N. Nace	CEA Cadarache	Edge plasma turbulence interaction with transport barriers generated by forced and self-consistent mechanisms
P1-10	H. Seto	JAEA	Flux-driven turbulence simulation of L-H transition with BOUT++ code
P1-11	M. Leconte	NFRI	Nonlinear oscillations in a Reaction-Diffusion model with ExB frequency shear: a paradigm for type-III ELMs
P1-12	N. Horsten	KU Leuven	Fluid neutral model for use in hybrid simulations of a detached ITER case
P1-13	S. Dai	NIFS	Parameter scan study of impurity transport model in comparison with EUV emission measurements in the stochastic layer of LHD: effects of first wall recycling and transport coefficients
P1-14	H. Inoue	Keio U	Extended Numerical Modeling of Impurity Neoclassical Transport in Tokamak Edge Plasmas
P1-15	H. Matsuura	Osaka PU	Study on molecular ion production during detached plasma formation in divertor simulator TPD-SheetIV
P1-16	S. Krashennnikov	UCSD	On divertor detachment and detachment stability
P1-17	H. Nishikata	Nagoya U	Detailed Analysis of Plasma Resistivity in Detached Plasmas
P1-18	A. Pigarov	UCSD	Modeling of ELMs in detached divertor plasmas with UEDGE-MB-W
P1-19	H. Tanaka	NIFS	Statistical analysis of particle flux flowing into the end-target in between attached and detached states in the linear divertor plasma simulator NAGDIS-II
P1-20	I. Borodkina	NRNU MEPhI	An analytical expression for the electric field and particle tracing in plasma-wall interaction experiments at the JET ITER-like wall
P1-21	K. Ghoos	KU Leuven	Accuracy and convergence of coupled finite-volume / Monte-Carlo codes for plasma edge simulations
P1-22	S. Yamoto	Keio U	Effects of classical and neo-classical cross-field transport of tungsten impurity in realistic tokamak geometry
P1-23	R. Tatsumi	Keio U	Basic Consideration of Monte-Carlo Algorithm to Solve Fluid Equations for SOL/Divertor Plasmas
P1-24	H. Kawashima	JAEA	Simulation of radiative divertor plasmas by Ar seeding with the full W wall in JT-60SA
P1-25	S. Mekkaoui	U York	Self-consistent turbulence-recycling modeling for PISCES-relevant linear plasma device conditions
P1-26	R. G. Rochford	Aalto U	Coupled core and edge Tokamak simulations using gyrokinetic full f Particle-In-Cell approach
P1-27	A. Fukano	Tokyo MCIT	Effects of multi-species ions on sheath and presheath in a magnetic field decreasing toward a wall
P1-28	D. Tskhakaya	TU Wien	Kinetic modelling of the detached divertor plasma
P1-29	S. Togo	U Tokyo	Simulation Study of Detached Plasmas by Using One-Dimensional SOL-Divertor Fluid Code with Virtual Divertor Model

Poster 2

Paper No	Presenter	Institution	Title
P2-01	T. Kuwabara	Nagoya U	Modelling of the linear divertor plasma simulator NAGDIS-II by using EMC3-Eirene code
P2-02	T. Takizuka	Osaka U	Bohm criterion and virtual divertor model for SOL-divertor simulation
P2-03	Y. Tomita	IPP, CAS	Electrostatic characteristic of a spherical dust on PFW in sheath field
P2-04	T. Onjun	Sirindhorn IIT	Study of Hysteresis Properties in Tokamak Plasma Based on Bifurcation Concept
P2-05	A. Fukuyama	Kyoto U	Dynamical transport modelling of radial profiles in tokamak edge plasmas
P2-06	Y. Igitchanov	Karlsruhe IT	Evolution of electron temperature in tokamak boundary plasma during a massive gas injection
P2-07	M. Yagi	JAEA	Nonlocal response of electron temperature fluctuation from edge to core in tokamak plasmas
P2-08	H. Takeda (To be presented by Y. Nakashima)	U Tsukuba	Numerical Simulation Study of Plasma Flow in the GAMMA 10/PDX End-cell Using a Fluid Code
P2-09	M. Hosokawa	ITER Org	Kinetic modelling of divertor fluxes during ELMs in ITER and effect of in/out divertor plasma asymmetries
P2-10	T. Onda (To be presented by N. Ohno)	Nagoya U	Mode structure analysis of detached plasma using a 2D image
P2-11	W. Dekeyser	ITER Org	SOLPS-ITER modeling of the Alcator C-Mod divertor plasma
P2-12	K. Hoshino	JAEA	Photon Absorption Effects in DEMO Divertor Plasma
P2-13	J. Rosato	Aix-Marseille U	Hybrid formulation of radiation transport in optically thick divertor plasmas
P2-14	I. Ivanova-Stanik	IPPLM	COREDIV and SOLPS numerical simulations of the nitrogen seeded JET ILW L-mode discharges
P2-15	D. P. Coster	MP IPP	Reduced physics models in SOLPS for reactor scoping studies
P2-16	X. P. Bonnin	ITER Org	Presentation of the new SOLPS-ITER code package for tokamak plasma edge modelling
P2-17	R. Zagorski	IPPLM	Modelling of the JET DT experiments in Carbon and ILW configurations
P2-18	N. Hayashi	JAEA	Integrated modeling of impurity transport in core and SOL/divertor plasmas
P2-19	K. Gałazka	IPPLM	Power exhaust management by impurity seeding in ASDEX Upgrade tokamak modeled by COREDIV code
P2-20	M. Blommaert	FZ Juelich	Magnetic Field Models and their Application in Optimal Magnetic Divertor Design
P2-21	P. A. Sdvizhenskii (To be presented by S. Krashennnikov)	Kurchatov Inst	A model of self-similar radiative transfer in resonance lines for testing the edge plasma codes
P2-22	S. Takamura	Aichi IT	Effect of PSI on momentum input to plasma-facing material surfaces
P2-23	K. Ibano	Osaka U	Particle simulations on effects of plasma-tungsten interaction to the prompt re-deposition and the self sputtering
P2-24	M. Shoji	NIFS	Simulation analysis of carbon deposition profile in the closed helical divertor configuration in the Large Helical Device
P2-25	G. Pelka	IPPLM	TECXY study of a liquid lithium divertor for DEMO