

21st ITPA meeting on SOL/divertor physics, 9-12 June 2015, PPPL, Princeton, USA

All sessions will be in the PPPL MGB Auditorium except for Wednesday 15:35 - 18:05 where the meeting will move to room B318.

Tuesday 9 June

Session			Start time	Duration	Speaker	Topic/title
Welcome						Chair: R. Pitts
			09:00	00:10	S. Prager (PPPL) and H. Guo	Welcome address and informations on meeting organization and local arrangements
			09:10	00:20	J. Menard	NSTX-U capabilities
Physics	1	Steady state divertor and 1st wall heat loads				Chair: A. Leonard
			09:30	00:20	M. Makowski	DIII-D heat flux width scaling
			09:50	00:20	T. Gray	NSTX heat flux width and divertor spreading
			10:10	00:20	A. Briesemeister	Divertor heat flux and detachment with 3D fields for RMP ELM control
		Break	10:30	00:20		
			10:50	00:20	M. Wischmeier for A.Scarabosio / I.Paradela	Link between divertor spreading and upstream density, $\lambda q/S$, SOLPS
			11:10	00:20	A. Leonard	Midplane profiles at detachment onset
			11:30	00:20	L. Wang	SOL widths with NBI vs. LHW on EAST
			11:50	00:20	C.S. Chang	Heat flux transport studies with XGC
			12:10	00:20		Discussion
		Lunch	12:30	01:30		
Modeling	2	Boundary modeling				Chair: N.N.
			14:00	00:20	S. Wiesen	The new SOLPS-ITER package: background, convergence metrics and benchmark with SOLPS4.3
			14:20	00:20	X. Bonnin	The new SOLPS-ITER package: launch workshop report and ongoing / future code upgrade plans
			14:40	00:20	A. Järvinen	Impact of divertor geometry on radiative divertor performance in JET H-mode plasmas
			15:00	00:20	M. Groth	Effect of drifts on divertor detachment in DIII-D
			15:20	00:20	S. Varoutis	Modelling of the JET and AUG particle exhaust system and its extension towards JT60SA and ITER
			15:40	00:20		Discussion
			16:00	00:20	Break	
	3	Far SOL & turbulence modeling				Chair: S. Wiesen
			16:20	00:20	H. Bufferand	Investigations on first wall recycling and sputtering with SOLEDGE2D-EIRENE
			16:40	00:20	D. Carallero	Far-SOL plasma flux
			17:00	00:20	P. Tamain	Progress towards self-consistent modelling of the interaction between turbulence and PWI physics in edge transport and turbulence codes
			17:20	00:20	O. E. Garcia	Intermittent fluctuations in the SOL: stochastic modeling, experimental measurements and implications for plasma-wall interactions
			17:40	00:20		Discussion
		Adjourn	18:00			
Wednesday 10 June						
Session			Start time	Duration	Speaker	Topic/title
Physics	4	ELM physics				Chair: R. Pitts
			09:00	00:20	M. Makowski	In/out asymmetry of ELM heat flux in DIII-D
			09:20	00:20	K.-S. Chung / M.-K. Bae	ELM filament transport in KSTAR
Physics	5	Heat loads to leading edges				Chair: R. Pitts
			09:40	00:20	P. Vondracek	Power loads to misaligned edges in COMPASS
			10:00	00:20	R. Dejarnac	PIC simulations of heat loads in the vicinity of ITER W-divertor monoblock gaps
		Break	10:20	00:20		
			10:40	00:20	H. Suk-Ho	Leading edge heat flux experiments on KSTAR
			11:00	00:20	R. Pitts for D. Rudakov	L-mode leading edge power loading on misaligned edges on the DIII-D DiMES probe
			11:20	00:20	K. Krieger	AUG results on penetration of ELM hot ion fraction into geometrical tile shadows
			11:40	00:35		Discussion
			12:15	00:15		Meeting in lobby for group photo
		Lunch	12:30	01:30		
Materials	6	PFC deterioration by ELMs				Chair: S. Masuzaki
			14:00	00:35	G. Miloshevsky / V. Sizyuk	Modeling of macroscopic melt splashing and losses of PFCs / MEMOS alternatives & HEIGHTS
			14:35	00:20	R. A. Pitts for N. Klimov et al.	Be-coated W target plasma pulse interaction
			14:55	00:20	T. Morgen / Y.Kikuchi	Vapour shielding - new results from Pilot-PSI on Al exposures
			15:15	00:20	J. Coenen for I. Uydenhouwen	Change of material properties due to W self-damage and hydrogen inventory with and without HHF
		Break	15:35	00:20		Coffee break and subsequent talks will be in room B318

Materials	6	PFC deterioration by ELMs (continued...)			Chair: S. Masuzaki
		15:55	00:20	M. Wirtz	Synergistic effects plasma / laser / He
		16:15	00:30	N. de Harder / S. Brezinsek	W-sputtering by ELMs / Chemically assisted W-sputtering
		16:45	00:20	A. Kirschner	ERO modeling of ELM erosion at the JET vertical W target
		17:05	00:20	R. Ding	ERO modeling of DIMES
		17:25	00:20	G.N. Luo / F. Ding	Results and status of W divertor operation on EAST
		17:45	00:30		Discussion
		Adjourn	18:15		
		Workshop Dinner	19:00		
Thursday 11 June					
Session		Start time	Duration	Speaker	Topic/title
Materials	7	Synergistic effects on surface dynamics			Chair: J. Coenen
		09:00	00:20	A. Kreter	Hydrogen retention under plasmas with seed impurities
		09:20	00:20	K. Schmid for G. Liang / K. Sugiyama	Hydrogen retention under plasmas with seed impurities IPP
		09:40	00:20	S. Masuzaki for Y. Hatano	Analysis of tritium retention in JET ILW divertor tiles using imaging plates
		10:00	00:20	M. Sakamoto	Impact of surface modification by He bombardment and W deposition on hydrogen isotope retention in tungsten
		Break	10:20 00:20		
		10:40	00:20	H. T. Lee	Influence of seeding impurities (N, Ne) on erosion properties and fuel retention in W
		11:00	00:20	G. Sergienko	Enhanced fuel retention at tungsten PFCs due to ELMs
		11:20	00:20	K. Schmid	ELM/wall recycling dynamics
		11:40	00:20	S. Krasheninnikov / A. Pigarov	Synergistic effects in plasma-wall interactions
		Lunch	12:00 01:30		
Materials	8	Synergistic effects on surface dynamics			Chair: K. Krieger
		13:30	00:20	G. de Temmerman	Ammonia production by seeding gases in ITER
		13:50	00:20	M. Oberkofler	Ammonia formation processes and prediction of rates expected for ITER N-seeded radiative scenarios
		14:10	00:20	S. Brezinsek for T. Dittmar	Formation of ND3 and its measurement in PSI-2
		14:30	00:20	P. Tabares	Ammonia formation and sticking in glow discharge plasmas
		14:50	00:20		Discussion
Modeling	9	PMI and dust modeling			Chair: K. Schmid
		15:10	00:20	D. Tskhakaya	Sheath properties as function of field line inclination and recycling
		15:30	00:20	P. Stangeby	Vanishing Debye sheath for B inclination angle $\rightarrow 0$
		Break	15:50 00:20		
		16:10	00:20	S. Masuzaki for N. Ohno	Fuzz and its impact on thermal properties
		16:30	00:20	B. Wirth	Computational modeling of tungsten surface behavior to low-energy He implantation
		16:50	00:20	R. Smirnov	Update on DUSTT modeling
		17:10	00:20	G. Niu	Dust modelling at ASIPP
		17:30	00:20	G. de Temmermann for L. Vignitchouk	Dust modelling status MIGRAINE
		17:50	00:20		Discussion
		Adjourn	18:10		
Friday 12 June					
Session		Start time	Duration	Speaker	Topic/title
Materials	10	Plasma facing components testing			Chair: J. Coenen
		09:00	00:20	J. Linke	ITER Materials Programme
		09:20	00:20	N. Asakura for S. Suzuki	New results from the Japanese W-PFC qualification tests
		09:40	00:20	J. Du	Testing and modeling of Be modules for ITER
		10:00	00:20	S. Khirwadker	Plasma Facing Component Development and Testing at IPR
11	Update on DSOL joint tasks & ITER action plan			Chair: K. Krieger	
		10:20	00:10	D. Douai	DSOL-23: Efficiency of ICRF conditioning
		10:30	00:10	A. Scarabosio	DSOL-28: Narrow heat flux widths and divertor power dissipation
		Break	10:40 00:20		
		11:00	00:10	R. A. Pitts	DSOL-31: Leading edge power loading and monoblock shaping
		11:00	00:10	M. Wischmeier	DSOL-32: Comparison of N2 and Ne divertor seeding
		11:10	00:10	S. Brezinsek	DSOL-33: He operations in metallic devices
		11:20	00:10	D. Carralero	DSOL-34: Far-SOL fluxes and link to detachment
		11:30	00:10	R. A. Pitts	DSOL-35: In out divertor ELM energy density asymmetries
12	Planning for next meeting			Chair: H. Guo	
		11:40	00:40		Discussion
		Adjourn	12:20		for general audience
		Break	12:20 00:10		
		12:30	00:30	H. Guo / R. A. Pitts / K. Krieger	Closed session for DSOL leadership team in room B252
		Adjourn	13:00		for DSOL leadership team