

**15th ITPA meeting on SOL/divertor physics, May 16-19, 2011**  
**Dipoli Conference Center**  
**Espoo**

<b>Day</b>	<b>Session</b>	<b>Time</b>	<b>Speaker &amp; Topic/title</b>	
<b>Monday</b>	<b>0 Opening</b>	8:30	T. Kurki-Suonio <i>Welcome and local arrangements</i>	
		8:40	B. Lipschultz <i>Meeting organization</i>	
	<b>1 Fuel retention MD simulations</b>		8:45	Chair: K. Schmid K. Schmid <i>what can MD bring to PWI modelling ?</i>
			9:05	Z. Yang <i>MD simulations of PWI at ASIPP</i>
			9:25	Udo v. Toussaint: <i>Hydrogen transport in tungsten</i>
			9:45	Y Ferro <i>The Interaction of H/T with Be and C from Density Functional Theory calculation - Formation of mixed Be/C materials</i>
			10:05	Heinola <i>Hydrogen retention in W - A Multiscale Approach</i>
			10:25	Coffee Break
			10:45	Juslin <i>MD simulation of H and He defects in W</i>
			11:05	F. Sefta <i>Modeling tungsten surfaces exposed to low- energy He/H plasmas on extended time scales (beyond MD)</i>
			11:25	K Schmid <i>Discussion</i>
			12:05	13:15 Lunch
	<b>2 Fuel removal</b>		13:20	Chair: E. Tsitrone Doerner <i>Be flash heating</i>
			13:40	Philipps <i>W flash heating</i>
			14:00	Davis <i>D reabsorption by depleted codeposits</i>
			14:20	M. Shimada

		<i>Deuterium retention in neutron-irradiated tungsten TBD</i>
	14:40	E. Tsitrone <i>Discussion</i>
<b>3 Fuel retention R&amp;D</b>	15:00	Chair: R. Doerner <i>Discussion</i>
	15:40	Coffee Break
<b>4 Dust</b>		Chair: D. Rudakov
	16:00	D. Rudakov <i>Introduction</i>
	16:05	N. Ashikawa <i>Dust ejection experiment using sphere carbon dust with different diameters in LHD</i>
	16:25	A. Litnovsky (provided available) <i>first results of a new dust campaign at TEXTOR / DIII-D</i>
	17:45	SH Hong <i>Large size hypervelocity dust observed in KSTAR + GDG detector + TReD</i>
	17:05	S. Budaev <i>dust generation in T-10 and QSPA + Dust immobilization in tokamaks</i>
	17:25	Volker Rohde <i>Dust investigations in AUG (collection, classification, comparison to lab measurements)</i>
<i>Dust R&amp;D</i>	17:45	D. Rudakov <i>Discussion</i>
	18:25	City of Espoo <i>Welcome reception, Gumböle Mansion</i>

<b>Day</b>	<b>Session</b>	<b>Time</b>	<b>Speaker &amp; Topic/title</b>
<b>Tuesday</b>			
	<b>5 Heat flux</b>		Chair: R. Pitts
	<i>A. Steady state heat flux experiment</i>		
		8:30	R. Pitts <i>Introduction</i>
		8:40	J Gunn <i>TS analysis</i>
		9:00	T. Eich <i>JET analysis</i>
		9:20	A. Leonard <i>Summary of US effort, DIII-D, C-mod and NSTX</i>
		9:40	R. Pitts <i>Discussion</i>
		10:00	Coffee Break
	<i>B. Steady state heat flux theory</i>		Chair: R. Pitts
		10:20	W. Fundamenski <i>Theory review</i>
		10:50	R. Goldston <i>An Heuristic Drift-Based Model of the Power Scrape-Off Width in H-Mode Tokamaks</i>
		11:10	V. Rozhansky <i>SOL current contribution to heat flux</i>
		11:30	R. Pitts <i>Discussion</i>
		12:00	Lunch
	<i>C. ELM heat flux</i>		Chair: R. Pitts
		13:20	M. Makowski <i>DIII-D analysis</i>
		13:40	A. Kallenbach <i>Impact of ELM mitigation with RMPs in AUG on edge parameters</i>
		14:00	R. Pitts <i>Discussion</i>
	<b>6 Detachment modelling</b>		Chair: T. Leonard
		14:20	M. Wischmeier; <i>Benchmarking exercise</i>

	14:40	M. Groth <i>Validation of detached L-mode plasmas in DIII-D, AUG, and JET with UEDGE</i>
	15:00	S. Weisen <i>SOLPS grid</i>
	15:20	T. Leonard <i>Discussion</i>
	15:40	Coffee Break
<b>7 Heat flux R&amp;D</b>	16:00	T. Leonard <i>Discussion</i>
<b>8 Fuel retention in gaps</b>		Chair: R. Doerner
	16:40	M Yoshida & T.Tanabe <i>Tritium retention in gaps of the tile in JT-60U</i>
	17:00	Hong <i>Erosion/deposition, and retention in gaps in KSTAR.</i>
	17:20	Tabares <i>Studies of hydrocarbon cracking and transport into gaps in TJ-II</i>
	17:40	R. Doerner <i>Discussion</i>
	18:00	adjourn (Dinner @Restaurant Olo for those registered)

<b>Day</b>	<b>Session</b>	<b>Time</b>	<b>Speaker &amp; Topic/title</b>
<b>Wednesday</b>			
	<b>9 Material migration</b>		Chair: V. Philipps
	<i>Main chamber migration</i>	8:30	V. Philipps <i>Introduction</i>
		8:40	D. Borodin <i>presentation on modelling of ITER wall erosion/deposition</i>
		9:00	S Lisgo <i>medium scale modelling of ITER main chamber erosion/redeposition</i>
		9:20	Karl Krieger <i>WallDYN applied to JET</i>
		9:40	A. Hakola <i>I3C injection experiments in AUG and their modeling using DIVIMP and ASCOT, with the focus on the main chamber</i>
		10:00	Matej Mayer <i>Long term tracer experiments for erosion / redeposition pattern on the first wall</i>
		10:20	Coffee Break
		10:40	V. Philipps <i>Discussion</i>
	<b>10 Be erosion</b>		Chair: P. Stangeby
		11:10	V. Kurnaev <i>New data on Be erosion obtained with QSPA plasma guns at ITER-like ELMs simulations</i>
		11:30	Thomas Schwarz-Selinger <i>Erosion/deposition balance in Be seeded high flux D discharges</i>
		11:50	P. Stangeby <i>Discussion</i>
		12:10	Lunch
	<b>11 Material migration R&amp;D</b>		Chair: V. Philipps / P. Stangeby
		13:25	V. Philipps / P. Stangeby <i>Discussion</i>
	<b>12 W damage</b>		Chair Y. Ueda
		14:05	Jochen Linke <i>Transient heat load tests on monolithic tungsten with high repetition rates</i>
		14:25	Jan Coenen

	14:45	<i>W melt experiments in tokamaks</i> Greg de Temmermann <i>W melting and melt layer motion experiments in Pilot-PSI</i>
	15:05	S. Masuzaki <i>Melting of tungsten sample and metal first wall in LHD</i>
	15:25	S. Budaev <i>Tungsten recrystallization after melting/erosion</i>
<b><i>13 WR&amp;D</i></b>	15:45	Y. Ueda / A. Kallenbach <i>Discussion</i>
	16:25	Coffee Break
<b><i>14 Next meeting date and topics</i></b>		
	16:45	Chair: E. Tsitrone
<b><i>15 DSOL/collaborative work</i></b>		
	17:30	Chair: B. Lipschultz
	18:30	adjourn

<b>Day</b>	<b>Session</b>	<b>Time</b>	<b>Speaker &amp; Topic/title</b>
<b>Thursday</b>			
	<b>16 General modelling review</b>		
		9:00	Chair: B. Lipschultz P. Stangeby <i>Improved modeling of prompt redeposition by magnetic pre-sheath forces</i>
		9:20	L Aho-Mantila <i>Integrated SOLPS5.0-ERO modelling of carbon migration in the outer divertor of ASDEX Upgrade</i>
		9:40	D. Coster <i>W modelling in SOLPS</i>
		10:00	TBD <i>Discussion</i>
		10:30	Coffee Break
	<b>8 Future plans</b>		
		11:00	Chair K. Krieger S. Brezinsek <i>ILW plans</i>
		11:20	Dr. Fang DING <i>Status and plan of material related experiments on EAST</i>
		11:40	JG Bak <i>preliminary results from the SOL measurements in the KSTAR machine including the plan for next campaign</i>
		12:00	K. Krieger <i>Discussion</i>
		12:30	adjourn

## Participants

1	Aho-Mantila	d+w
2	Airila	--
3	Ashikawa	d
4	Bak	
5	Borodin	
6	Brezinsek	d
7	Budaev	
8	Coenen	
9	Coster	d+w
10	Davis	d
11	De Temmerman	
12	Ding	
13	Dittmar	d(+w?)
14	Doerner	--
15	Eich	d+w
16	Ferro	
17	Fundamenski	
18	Goldston	d(+w?)
19	Groth	d
20	Hakola	d(+w?)
21	Hammond / Sefta	
22	Heikkinen	--
23	Heinola	--
24	Juslin	d
25	Kallenbach	d+w
26	Krieger	d(+w?)
27	Kukushkin	d(+w?)
28	Kurki-Suonio	d+w
29	Kurnaev	
30	Hong	
31	Leerink	d+w
32	Leonard	d(+w?)
33	Likonen	d+w
34	Linke	d(+w?)
35	Lipschultz	d+w
36	Lisgo	
37	Litnovsky	--
38	Makowski	d(+w?)
39	Masuzaki	d(+w?)
40	Mayer	d(+w?)
41	Nakano	d+w
42	Philipps	
43	Pitts	d(+w?)
44	Rhode	d+w
45	Rozhansky	



46	Rudakov	
47	Schmid	
48	Schwarz-Selinger	
49	Shimada (Ma)	
50	Shimada (Mi ?)	d+w
51	Stangeby	d+w
52	Tabares	
53	Tsitrone	d
54	Ueda	d+w
55	Umansky	d(+w?)
56	Van Toussaint	
57	Weisen	
58	Wischmeier	d+w
59	Wang	
60	Wong	d(+w?)
61	Yang	
62	Yoshida	d(+w?)
63	Zagorsky	--