

# 31st ITPA meeting of TG SOL and divertor physics, The Internet, 18.01.–26.01.2022

Sessions will be held as Zoom video conference

Legend of general session topics: **Plasma Physics**, **Materials**, **Modelling**

Sessions will be scheduled within the four hour time frame shown below for a number of relevant time zones across the globe - Times in agenda refer to Central European Time (CET)

Location	Time (CET)	TUE	WED
San Diego... United States...	06:00 - 10:00 Tue, Jan 18 Tue, Jan 18	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	
+2 Madison ... United States...	08:00 - 12:00 Tue, Jan 18 Tue, Jan 18	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	JAN 19 1
+3 Oak Ridg... United States...	09:00 - 13:00 Tue, Jan 18 Tue, Jan 18	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	JAN 19 1 2
+8 London ... United Kingd...	14:00 - 18:00 Tue, Jan 18 Tue, Jan 18	8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	JAN 19 1 2 3 4 5 6 7
+9 Munich <sup>CET</sup> Germany	15:00 - 19:00 Tue, Jan 18 Tue, Jan 18	9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	JAN 19 1 2 3 4 5 6 7 8
+11 Moscow ... Russia	17:00 - 21:00 Tue, Jan 18 Tue, Jan 18	11 12 13 14 15 16 17 18 19 20 21 22 23	JAN 19 1 2 3 4 5 6 7 8 9 10
+16 Beijing <sup>CST</sup> China	22:00 - 02:00 Tue, Jan 18 Wed, Jan 19	16 17 18 19 20 21 22 23	JAN 19 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
+17 Tokyo <sup>JST</sup> Japan	23:00 - 03:00 Tue, Jan 18 Wed, Jan 19	17 18 19 20 21 22 23	JAN 19 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
+19 Sydney ... Australia	01:00 - 05:00 Wed, Jan 19 Wed, Jan 19	19 20 21 22 23	JAN 19 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

## Tuesday 18 Jan

	Start time	Duration	Discussion	Speaker	Topic/title
<b>Welcome address and organisational issues</b>					
	15:00	0:10			
<b>Session 1</b>	<b>DSOL-44 End-of-lifetime criteria for divertor PFCs</b>				<b>Chair: J. Coenen, E. Tsitrone</b>
	15:10	0:10	0:05	J. Coenen	Introduction
	15:25	0:15	0:05	A. Durif	Interpretation of the tungsten divertor monoblock damage observed in WEST
	15:45		0:30		Discussion
	<b>Coffee Break</b>	<b>16:15</b>	<b>0:10</b>		
<b>Session 2</b>	<b>DSOL-45 Efficiency and optimisation of ECWC</b>				<b>Chair: T. Wauters</b>
	16:25	0:10	0:05	T. Wauters	Introduction
	16:40	0:15	0:05	R. Ragona	Overview ASDEX Upgrade ECWC experiment
	17:00	0:15	0:05	J. Buermans	Preliminary report TCV ECWC experiment
	17:20	0:15	0:05	B. Shukla	EC-wave experiments on SST-1
	17:40		0:30		Discussion
	<b>Adjourn</b>	<b>18:10</b>			

## Wednesday 19 Jan

	Start time	Duration	Discussion	Speaker	Topic/title
<b>Session 3</b>	<b>Neutrals Dynamics</b>				<b>Chair: R. Ding</b>
	15:00	0:05	0:00	R. Ding	Introduction of new DSOL on CX-Wall erosion
	15:05	0:15	0:05	R. Ding	Studies of neutral-induced material erosion in EAST
	15:25	0:15	0:05	K. Schmid or L. Bock	Influence of 3D wall geometry on neutrals distribution and SOL flows
	15:45	0:15	0:05	D. Borodin	Neutral gas dynamics in the edge
	16:05	0:15	0:05	D. Rudakov and R. Hood	CX neutral measurements in DIII-D: initial results and future plans
	<b>Coffee Break</b>	<b>16:25</b>	<b>0:10</b>		
	16:35		0:30		Discussion
<b>Session 4</b>	<b>DSOL-33 He operations in devices with metallic PFCs</b>				<b>Chair: S. Brezinsek</b>
	17:05	0:10	0:05	S. Brezinsek	Introduction
	17:20	0:15	0:05	S. Brezinsek	Proposal for He plasmas for PWI-studies in JET as benchmark for ITER (ERO2.0)
	17:40	0:15	0:05	E. Tsitrone	Update on the WEST He experiments : status of post mortem analysis and modelling
	<b>Coffee Break</b>	<b>18:00</b>	<b>0:10</b>		
	18:10	0:15	0:05	M. Passoni	Coupled SOLPS-ITER and ERO2.0 investigation of Helium plasma behavior and model surface microscale evolution in the GYM linear device
	18:30		0:30		Discussion
	<b>Adjourn</b>	<b>19:00</b>			

Thursday 20 Jan								
			Start time	Duration	Discussion	Speaker	Topic/title	
Session	5	DSOL-34: Far-SOL fluxes and their link to detachment					Chair: N. Vianello	
			15:00	0:05	0:00	N. Vianello	Introduction	
			15:05	0:15	0:05	J. Boedo	Role of neutrals and particle transport in the density shoulder formation in D3D	
			15:25	0:15	0:05	C. Tsui	TCV and the role of main chamber neutral in the SOL shoulder formation in L-mode	
			15:45	0:15	0:05	N. Yan	Study on density profile broadening of the far SOL plasmas operated with a new upgraded divertor on EAST	
		Coffee Break	16:05	0:10				
			16:15	0:15	0:05	A. Redl	Energy deposition in high density small ELM regimes onto the first wall with calorimetric measurements in ASDEX Upgrade	
			16:35	0:15	0:05	A. Stagni	Dependence of scrape-off layer profiles and transport on gas fuelling in high-density H-mode regimes in TCV	
			16:55	0:15	0:05	D. S. Oliveira	Validation of edge turbulence codes against the TCV-X21 diverted L-mode reference case	
			17:15		0:45		Discussion	
Session	6	MDC-DSOL collaboration					Chair: T. Nakano	
			18:00	0:15	0:05	E. Hollmann	MDC-DSOL: wall heat loads during disruptions & runaways (B1.1, B1.3)	
			18:20	0:15	0:05	B. Zhu	BOUT++ turbulence simulations of edge plasma dynamics and divertor heat load during thermal quench	
			18:40		0:20		Discussion	
		Adjourn	19:00					
Friday 21 Jan								
			Start time	Duration	Discussion	Speaker	Topic/title	
Session	7	DSOL-37 Effects of 3-D fields on divertor conditions and PWI					Chair: O. Schmitz/M. Jakubowski	
			15:00	0:15	0:05	O. Schmitz	Overview on focus and new results on 3D boundary vs. plasma response	
			15:20	0:20	0:05	J. Van Blaricum	Analysis of low n and higher n RMP plasma response impact on divertor fluxes	
			15:45	0:20	0:05	Manni Jia	Plasma response effect on the divertor heat flux distribution during ELM suppression by RMPs	
			16:10	0:20	0:05	H. Lee	Progress in the understanding of the effects of RMPs on the divertor heat flux in high density plasmas	
		Coffee Break	16:35	0:10				
			16:45		0:45	O. Schmitz	Discussion	
Session	8	General					Chair: J. Rapp	
			17:30	0:15	0:05	K. Krieger	NF special issue	
			17:50		1:00		Discussion	
		Adjourn	18:50					
Monday 24 Jan								
			Start time	Duration	Discussion	Speaker	Topic/title	
Session	9	DSOL-40 ELM heat load studies + PEP joint session on small ELMs					Chair: M. Faitsch	
			16:00	0:10	0:05	M. Faitsch	Introduction	
			16:15	0:15	0:05	M. Faitsch	Introduction of PEP joint topic on small ELMs	
			16:35	0:15	0:05	M. Komm / J. Hecko	H-mode inter-ELM power decay length at COMPASS	
			16:55	0:15	0:05	J. Horacek	Fast ELM temperature measurement in COMPASS and JET tokamak divertors	
			17:15	0:15	0:05	M. Knolker	Pedestal stability analysis on MAST in preparation for MAST-U	
		Coffee Break	17:35	0:10				
			17:45	0:15	0:05	R.S. Wilcox	Pellet triggering of edge localized modes in low collisionality pedestals at DIII-D	
			18:05	0:15	0:05	R. Perillo	ELM and inter-ELM heat and particle flux to a secondary divertor in the DIII-D tokamak	
			18:25		0:30		Discussion	
		Adjourn	18:55					
Tuesday 25 Jan								
			Start time	Duration	Discussion	Speaker	Topic/title	
Session	10	DSOL-32/41/43 Detachment Phys and control					Chair: M. Bernert	
			15:00	0:05	0:00	M. Bernert	Introduction	
			15:05	0:15	0:05	T. Ravensbergen	ITER detachment control diagnostics	
			15:25	0:15	0:05	D. Eldon	DIII-D and KSTAR Lp saturation current for detachment control	
			15:45	0:15	0:05	L. Wang	Latest detachment progress with new lower W divertor in EAST	
			16:05	0:15	0:05	Matthijs van Berkel	Why dynamic measurements are crucial for time-dependent modelling of detachment?	
		Coffee Break	16:25	0:10				
			16:35	0:15	0:05	Cyd Cowley	Optimizing Detachment Control Using the Magnetic Configuration of Divertors	
			16:55		1:00		Discussion	
		Adjourn	17:55					

Wednesday 26 Jan								
			Start time	Duration	Discussion	Speaker	Topic/title	
Session	11	DSOL-32/41/43 Detachment Phys and control (cont')					Chair: S. Wiesen/M. Wischmeier	
			15:00	0:05	0:00	S. Wiesen	Introduction	
			15:05	0:15	0:05	Jeremy lore	Development of reduced models for boundary control applications using SOLPS-ITER	
			15:25	0:15	0:05	Ou Pan	AUG detachment modelling	
			15:45	0:15	0:05	Teo Luda	IMEP integrated modelling	
			16:05	0:15	0:05	C. Giroud	JET on high-power Neon seeded scenarios in vertical target shape;+DT	
		<b>Coffee Break</b>	<b>16:25</b>	<b>0:10</b>				
			16:35	0:15	0:05	P. C. Stangeby	Toward a reduced model for the ITER divertor based on SOLPS-ITER solutions for ITER	
			<b>16:55</b>		<b>0:55</b>		<b>Discussion</b>	
		<b>Coffee Break</b>	<b>17:50</b>	<b>0:10</b>				
Session	12						Chair: T. Wauters	
			18:00	0:30	0:00	R. A. Pitts	ITER introduction (construction status) / open issues (R&D) in ITER / He-campaign + new DSOL proposals	
			18:30		<b>0:30</b>		<b>Discussion</b>	
		<b>Adjourn</b>	<b>19:00</b>					