

Agenda for EUROfusion Joint Working Session of WPJET1/WPJET2/WPMST1/WPPFC Tervaniemi, 03.02.-06.02.2015

The objective of this workshop is the presentation of the current status of modelling efforts with emphasis on identification of open issues, urgent near- and mid-term R&D requirements and on discussion of possible collaborations and of proposals for supporting experiments.

1. Tuesday - Plasma boundary and SOL codes

Session organisers: Marco Wischmeier (marco.wischmeier@ipp.mpg.de) &
Sven Wiesen (s.wiesen@fz-juelich.de)

10:20-10:30	LOC	Welcome
10:30-11:00	M. Wischmeier (IPP)	Introduction: MST1-JET1 combined effort
11:00-11:30	P. Paradela (IPP)	Power spreading in tokamak divertor using SOLPS code
11:30-12:00	D. Moulton/S. Varoutis (CCFE)	Simulation of subdivertor pressures in JET and ASDEX Upgrade
12:00-14:00		Lunch break
14:00-14:30	M. Groth (Aalto University)	Characterization of the radiation shortfall in JET-ILW deuterium L-mode plasmas
14:30-15:00	L. Aho-Mantila (VTT)	Divertor power exhaust modelling with N impurities, AUG vs. JET
15:00-15:30	A. Jarvinen (Aalto University)	Studies of detachment dynamics at JET
15:30-16:00		Coffee break
16:00-16:30	S. Wiesen (FZJ)	Effect of PFC recycling conditions on JET pedestal performance
16:30-18:30		(Break-out discussions, closed meetings)
17:30-19:30		Cross-country skiing
20:00		Dinner

2. Wednesday - Plasma boundary and SOL codes

Session organisers: Marco Wischmeier (marco.wischmeier@ipp.mpg.de) &
Sven Wiesen (s.wiesen@fz-juelich.de)

09:00-09:30	H. Bufferand (CEA)	Simulation of main chamber recycling and Be sputtering on JET with Soledge2D-EIRENE
09:30-9:50	J. Karhunen (Aalto University)	Modelling HFS SOL flows in ASDEX Upgrade by SOLPS and ERO
9:50-10:10	D. Coster (IPP)	On simulations of W behaviour on ITER for mitigated ELMs
10:10-10:30		Coffee break
10:30-11:00	T. Lunt (IPP)	Main chamber wall particle- and energy fluxes and recycling with 3D plasma facing components in AUG
11:00-11:30	D. Reiser (FZJ)	Global modelling of plasma-wall interaction effects of turbulences
11:30-12:00		Discussion
12:00-14:00		Lunch Break
14:00-14:30		Discussion

3. Wednesday - Codes for thermomechanical response of PFMs and for dust dynamics

Session organisers: Karl Krieger (krieger@ipp.mpg.de)
Svetlana Ratynskaia (svetlana.ratynskaia@ee.kth.se)

14:30-15:00	F. Maviglia (3PT)	Analysis of transient power loads on PFCs and mitigation techniques
15:00-15:30	S. Pestchany (KIT)	Simulation of melt motion by MEMOS (title tbc)
15:30-16:00		Coffee break
16:00-16:30	M. Bacharis (Imperial College)	DTOKS: Modelling Dust and TIEs
16:30-17:00	L. Vignitchouk (KTH)	Dust vaporization and accumulation sites formation
17:00-18:00		Discussion
18:30-22:00		Sauna & ice-water swimming + snacks

4. Thursday - Codes for processes in Plasma Facing Materials

Session organiser: Antti Hakola (antti.hakola@vtt.fi)

09:00-09:30	I. Sukuba (CU)	MD modelling of D irradiation of Be-W mixed materials
09:30-10:00	E. Safi (VTT-UH)	Plasma-wall interactions of Be and Fe
10:00-10:30		Coffee break
10:30-11:00	C. Björkas (VTT-UH)	Multiscale simulations of W fuzz formation
11:00-11:30	K. Schmid (IPP)	Diffusion-trapping modelling of recycling under ELM like heatloads
11:30-12:00	U. v. Toussaint (IPP)	Effective fluxes in PFM modelling
12:00-14:00		Lunch Break
14:00-15:00		Discussion

5. Thursday - Plasma-wall interface codes

Session organisers: Andreas Kirschner (a.kirschner@fz-juelich.de)

Klaus Schmid (klaus.schmid@ipp.mpg.de)

15:00-15:30	D. Tskhakaya (ÖAW)	PIC modelling of the plasma sheath
15:30-16:00	K. Schmid (IPP)	Current status of WalldYN
16:00-16:30		Coffee break
16:30-17:00	D. Borodin (FZJ)	Modelling of erosion and deposition at beryllium wall tiles in JET
17:00-17:30	P. Tamain	Influence of fluctuations on impurity transport
17:30-18:30		Discussion
18:30-19:55		Preparational sub-group discussions on conclusions / Additional chance for cross-country skiing
20:00		Dinner

6. Friday - Discussion of upcoming experiments and codes - diagnostics requirements for modelling, code development requirements

Session organiser: Sebastijan Brezinsek (s.brezinsek@fz-juelich.de)

09:00-09:35		Summary "Plasma Boundary & Wall Interface Modelling"
09:35-10:00		Summary "Modelling of Materials Processes"
10:00-10:30		Coffee break
10:30-12:00		Discussion
12:00-13:30		Lunch
13:30		Departure to airport