

PMIF-2023 Workshop Agenda quick overview

Time	30-10-2023	31-10-2023	1-11-2023
08:10	Registration		
09:10	Welcome		
09:25	van Eck	Riesch	Soni
09:50	Rapp	Kreter	Kawan
10:15	Sakamoto	Nuckols	Schutjes
10:40	Coffee	Coffee	Coffee
11:05	Uccello	Tang	Ezumi
11:30	Rayaprolu	Tipping	Sackers
11:55	Reinhart	Discussion	Discussion & Closing
12:20	Lunch		
12:45	Lunch	Lunch	Lunch
13:10	Lunch		
13:35	Andruczyk I	Andruczyk II	IAEA Ex-Co meeting [closed session]
14:00	Timmer	Nieto-Perez	
14:25	Tanke	Marin	
14:50	Coffee	Coffee	
15:15	Dhamale	Romano	
15:40	Matveev	Discussion	
16:05	Mombelli	Discussion	
16:30	Discussion	Tour DIFFER facilities	
16:55	Discussion	Tour DIFFER facilities	
17:20	End		
17:30	Reception		
19:30	End reception		

	Development of plasma-material interaction facilities
	Theory and modelling
	Testing of first wall and divertor materials: Solid materials
	Testing of first wall and divertor materials: Liquid metals
	Diagnostics for plasma and material science & Plasma edge and divertor physics

PMIF-2023 Workshop Agenda		
Time	Person	Title
Monday 30th October 2023		
8:10	Registration	
9:10	Welcome	
	Session I: Development of plasma-material interaction facilities I (Chair: Thomas Morgan)	
9:25	van Eck	Status and outlook of the PSI facilities at DIFFER
9:50	Rapp	MPEX transitioning to operations and science exploitation
10:15	Sakamoto	Present Status of a Pilot GAMMA PDX-SC project
10:40	Coffee	
11:05	Uccello	Exploring magnetic confinement fusion plasma-material interaction: the road to the BiGyM linear device
11:30	Rayaprolu	First plasma experiments at the nuclear linear plasma device JULE PSI with an outlook to future experiments
11:55	Reinhart	Plasma parameter characterisation at the new nuclear linear plasma device JULE PSI with Langmuir probe and optical spectroscopy measurements
12:20	Lunch	
	Session II: Development of plasma-material interaction facilities II (Chair: Juergen Rapp)	
13:35	Andruczyk	The Center for Plasma–Material Interactions (CPMI) at the University of Illinois
14:00	Timmer	Tackling the challenges of Operando Ion Beam Analysis in the Linear Plasma Generator ‘Upgraded Pilot-PSI’
14:25	Tanke	Liquid Metal challenges for the development of the Liquid Metal Shield laboratory and its current status
14:50	Coffee	
15:15	Dhamale	Understanding impurity transport in PISCES-RF device
	Session III: Theory and Modelling (Chair: Juergen Rapp)	
15:40	Matveev	Dynamics of vacancies and self-interstitial atoms in beryllium during exposure to hydrogen ions and its implications on hydrogen retention
16:05	Mombelli	Numerical investigation of Plasma-Material Interaction in GyM linear device through SOLPS-ITER and ERO2.0 codes
16:30	Discussion	
17:20	End	
17:30	Welcome Reception	
19:30	End reception	
Tuesday 31st October 2023		
	Session IV: Testing of first wall and divertor materials: Solid materials (Chair: Tom Wauters)	
9:25	Riesch	Testing of tungsten fibre-reinforced tungsten composites at the neutral beam facility GLADIS
9:50	Kreter	Influence of nitrogen seeding on the fuel retention in tungsten

10:15	Nuckols	Impact of Deuterium Plasma Exposures from PISCES-RF on TiB ₂ and ZrB ₂
10:40	Coffee	
11:05	Tang	New Plasma Facing Materials Possibility: Diamond-Tungsten Composite
11:30	Tipping	The Transient Thermal Ageing of Eurofer 97 by Mitigated Plasma Disruptions
11:55	Discussion	
12:20	Lunch	
	Session V: Testing of first wall and divertor materials: Liquid Metals (Chair: Arkadi Kreter)	
13:35	Andruczyk	A US-based Liquid Metal Divertor and PFC Design Program
14:00	Nieto-Perez	Experiments to measure liquid lithium permeability across porous tungsten
14:25	Marin	Spark plasma sintering of zirconium alloyed porous tungsten: assessment on the surface chemistry and hydrophilicity
14:50	Coffee	
15:15	Romano	Studying the physics of the lithium vapour box in the linear plasma generator Magnum-PSI
15:40	Discussion	
16:30	Tour DIFFER facilities	
17:20	End Tour	
Wednesday 1st November 2023		
	Session VI: Diagnostics for plasma and material science & Plasma edge and divertor physics (Chair: Bernhard Unterberg)	
9:25	Soni	Enhancing Depth LIBS Analysis of Fusion Relevant Material – Resonant LIBS vs. ps/ns LIBS Comparison
9:50	Kawan	Global material migration and deposition data for modeling benchmarks: Results from the W7X from 13CH ₄ injection experiment
10:15	Schutjes	TALIF and CARS Diagnostics for Measuring Atomic and Molecular Hydrogen Densities in Divertor-relevant Plasmas
10:40	Coffee	
11:05	Ezumi	Observing Plasma Detachment in GAMMA 10/PDX using a High-Speed Camera with Four-Branch Imaging Optics
11:30	Sackers	Effects of finite-sized targets on the emission spectra of sputtered atoms in linear plasma devices
11:55	Discussion & Closing	
12:20	Lunch	
13:35	IAEA Ex-Co meeting [closed session]	
16:30	End Ex-Co meeting	