

Session Program

17-22 May 2026



27th PSI Conference
Regensburg 2026

27th PSI

Postersession 3

marinaforum REGENSBURG

Thursday 21 May

15:55

Postersession 3: Tracks B, C, E, G and J

Poster Session

3.091 Development and High Heat Flux Testing of Cold Sprayed Tungsten-based Coatings for the ITER Temporary First Wall

Speaker

Hans Maier

3.070 Influence of nitrogen recycling on toroidally asymmetric heat load on CFETR X-divertor with EMC3-EIRENE modelling

Speaker

Tian Xie

3.050 Mesoscale structures and anomalous transport driven by the RDW turbulence

Speaker

Prof. Sergei Krasheninnikov

3.092 Plasma Flow Measurements for Investigating Impurity Transport in the Helicon-Based PMI Device PISCES-RF

Speaker

Yuta KINASHI

3.098 Investigating Divertor and PFC Safety Limits for Planned NSTX-U Experiments Using UEDGE

Speaker

Dr Vlad Soukhanovskii

3.108 Introduction of cross-field drifts in SOLPS-ITER simulations of STEP with fully tracked Ar impurities

Speaker

Dr Juuso Karhunen

3.110 Development and validation of an XPR model in the ASDEX Upgrade flight simulator integrated modelling framework

Speaker

Fabian Solfronk

3.116 Characterizing SOL Heat Transport in Wendelstein 7-X with SMoLID

Speaker

Amit Kohinoor Kharwandikar

3.118 Plasma-Assisted Growth and Stability of Thick Boron Layers on Tungsten Under Fusion-Relevant Conditions

Speaker

Cas Robben

3.119 Lithium impurity transport in fusion devices

Speaker

Mr Romain Avril

3.080 Rapid exhaust operational space studies employing AI workflows: the low-aspect ratio EU-DEMO as a use case**Speaker**

Sven Wiesen

3.082 Experimental investigation on the flux-dependence of He clustering in polycrystalline and single-crystalline W**Speaker**

Annemarie Kärcher

3.081 Evaluation of Additively Manufactured Tungsten and Cold Spray Tantalum Coating Performance through DiMES Plasma Exposures at DIII-D**Speaker**

Charles Hirst

3.103 Towards dynamical system identification simulations using multisine perturbations for MAST-U with SOLPS-ITER**Speaker**

Stijn Kobussen

3.106 Avoidance of large ELMs through impurity seeding**Speaker**

Martim Zurita

3.068 Investigations of impurities and pellet injection in EAST and HL-3 tokamaks**Speaker**

Zhuang Liu

3.090 The impact of concurrent displacement damage on retention for high-flux D2-10%He plasma-exposed tungsten**Speaker**

Marlene Patino

3.025 High heat flux exposure of advanced tungsten composites and chromium in the DIII-D divertor under Fusion Pilot Plant-relevant conditions**Speaker**

Žana Popović

3.046 The effect of high-energy proton irradiation on deuterium permeation and retention in tungsten-based materials**Speaker**

Zhe Liu

3.102 Development and exhaust performance of the X divertor on MAST Upgrade**Speaker**

Jack Lovell

3.045 Damage induced by low-energy plasma and MeV ions and its effect on deuterium permeation and retention in tungsten-based materials**Speaker**

Minyou Ye

3.055 Hydrogen isotope permeation and retention in pure and dispersion-strengthened tungsten: from pristine microstructures to helium-induced fuzz surfaces

Speaker
zeshi gao

3.065 Integrated Core-Edge Modelling of Tungsten Using SOLEDGE-3X and Application to WEST Experiment

Speaker
Naren Varadarajan

3.031 FIRST SPECTRUM OF TUNGSTEN' EMISSIVITY AFTER EXPOSITION IN THE WEST TOKAMAK

Speaker
Estelle ROMULUS

3.040 Deuterium retention in radiation- and plasma- induced defects and co-deposited layers in W and W-Cr-Y alloy

Speaker
Olga Ogorodnikova

3.087 A Systematic Study on Detonation-Sprayed Tungsten/Steel First Wall Structures: From Process Development to Performance Evaluation

Speaker
Prof. Zongxiao Guo

3.086 Performance Analysis of Additively Manufactured Tungsten through L-mode and H-mode DiMES Plasma Exposures at DIII-D

Speaker
Dylan Kohler

3.096 Simulation of disruptions and small-ELMs regimes by a CW laser over different advanced tungsten materials at the OLMAT high heat flux facility

Speaker
Daniel Alegre Castro

3.100 Boron-Enhanced W-Ta-V-Cr-Ti High-Entropy Alloys as Advanced Plasma-Facing Materials for Fusion Reactors

Speaker
Dr Zori Harutyunyan

3.084 Numerical study on surface heat load and erosion for limiter design in JA DEMO

Speaker
weixi chen

3.109 3D Synthetic Bolometry and Radiation Asymmetry Analysis for ITER SPI-Mitigated Disruptions

Speaker
Koyo Munechika

3.094 Optimization of Additive Manufactured Tungsten Lattice Structures for Liquid Metal Infiltration in Plasma-Facing Components

Speaker
Matthieu Spinosi

3.027 Microscopy study of plasma- and laser-induced effects in tungsten components exposed to helium and hydrogenic plasmas in JET

Speaker
Yevhen Zayachuk

3.035 Interpretative and predictive analysis of impurity migration in GyM and BiGyM through ERO2.0 Monte Carlo transport code

Speaker
Francesco Cani

3.067 A ^{15}N tracer injection experiment to study long range impurity transport in W7-X

Speaker
Timo Dittmar

3.052 Divertor Fuel Injection System for Detachment Experiments in KSTAR

Speaker
Mr Jae-in Song

3.058 Plasma Fueling and Particle Exhaust Control in a fusion power reactor

Speaker
Dr Yuri IGITKHANOV

3.095 SONIC simulation studies of neutral-neutral collision and extended thermal force, and effects on JA DEMO detached divertor and impurity control

Speaker
Dr Nobuyuki Asakura

3.093 Integrated modeling of open-surface liquid metal divertors

Speaker
Jeremy Lore

3.107 Modelling kinetic electron effects for transient heat-loads in the detached MAST-Upgrade Super-X divertor

Speaker
Sid Leigh

3.049 Irradiation damaging of EUROFER97 to very large damage doses: lattice strain and deuterium retention

Speaker
Thomas Schwarz-Selinger

3.066 Erosion and deposition patterns on ITER-grade actively-cooled divertor in WEST high-fluence campaign: analysis and comparison with SOLEDGE3X and ERO2.0 modeling results

Speaker
Alexis Huart

3.077 INVESTIGATION OF PLASMA-WALL INTERACTION AND IMPURITY TRANSPORT BEHAVIORS OF HL-3 PLASMAS

Speaker

Liang Liu

3.104 First L-Mode experiments in Alternative Divertor Configurations in ASDEX Upgrade**Speaker**

Felix Albrecht

3.063 Experimental and Numerical Characterization of ICRF-Induced Plasma-Wall Interaction in the Regime of Propagative Slow Waves**Speaker**

Raymond Diab

3.056 Theoretical modeling of hydrogen transport in boron structures**Speaker**

Bianca Solomonea

3.088 Application of the kinetic ion transport model EMC3-EIRENE- KIT for W transport in full-3D wide-grid H-mode scenarios for the ITER SRO and DT-1 phases**Speaker**

Derek Harting

3.115 The importance of drifts and radial transport assumptions in 2D modelling of the access to detachment and XPR in WEST**Speaker**

Eva Havlickova

3.048 Modelling of Hydrogen Isotopes Exchange in Self-Damaged Tungsten**Speaker**

Mr Jonathan DUFOUR

3.076 Initial experiment of an internal coil device for impurity transport study**Speaker**

Atsushi Okamoto

3.062 Impact of impurity powder injection on the first wall material transport in LHD**Speaker**

Suguru Masuzaki

3.033 Investigation of Lithium sources and transport with flowing liquid metal plasma facing components**Speaker**

Hugo Bufferand

3.034 Boron-Tungsten Coatings for Fusion-Relevant Studies: Plasma Parameters versus Film Properties**Speaker**

Corneliu Porosnicu

3.044 Plasma-Driven Hydrogen Permeation Properties of Tungsten Deposited Films Fabricated by Argon Plasma**Speaker**

Kentaro Masuta

3.053 Density Limits on the KSTAR Plasmas**Speaker**

June-Woo Juhn

3.064 Influence of impurity injection location on tokamak plasma performance**Speaker**

Riccardo Ian Morgan

3.047 The effect of surface-near helium on deuterium retention in tungsten and EUROFER**Speaker**

Sabina Markelj

3.117 Revisiting the ITER $Q_{\text{DT}} = 10$ SOLPS-4.3 database with SOLPS-ITER with drifts and currents**Speaker**

Aaro Järvinen

3.054 Retention modelling for stellarator reactor design based on W7-X**Speaker**

Sebastian Rode

3.039 Deuterium Retention in Tungsten After Deuterium-Nitrogen Co-bombardment**Speaker**

Steven Thériault

3.042 Scaling Laws and Application of a Neutral Gas Evaporation Shielding (NGES) Model in HL-2A Pellet Injection Experiments**Speaker**

Dazheng Li

3.112 Control of the radiated power using bolometers and the impact of observed asymmetries on the radiated power proxy in Wendelstein 7-X**Speaker**

Anastasios Tsikouras

3.101 Assessing the tightly baffled long-legged divertor (TBLLD) concept in TCV**Speaker**

Holger Reimerdes

3.043 Dynamics of Deuterium Retention in Boron Thin Films on Tungsten During High-Flux Plasma Exposures in DIONISOS**Speaker**

Joey Demiane

3.030 Experimentally constrained modeling of the energy spectrum and impact angle distribution of wall impacting neutrals and their role in main-chamber erosion**Speaker**

Shaun Haskey

3.085 Detachment via Impurity Seeding, Heat Exhaust and Erosion in DIII-D in 3D Fields

Speaker
Marcos Navarro

3.111 Preparation of Boundary Digital twin for SPARC boundary physics operations

Speaker
Andreas Redl

3.099 Influence of inter-pulse delay in double-pulse laser-induced breakdown spectroscopy on the detection of implanted deuterium in tungsten

Speaker
Erik Wüst

3.029 Simulations of tungsten gap bridging under ITER-like disruption conditions

Speaker
Ladislav Vignitchouk

3.072 Tungsten Impurity Effects on Effective Charge and Radiation Fraction in KSTAR Plasmas

Speaker
Juhyeok Jang

3.083 Reactor-Scale Island Divertor Simulations of W7-X-like Configurations

Speaker
Kelly Garcia

3.097 Testing of VPS and PVD Tungsten Coatings on Steel in WEST for the ITER Temporary First Wall

Speaker
Marianne Richou

18:05