FuseNet PhD Event 2025 ITER

Poster Session 1 - Wednesday 15:45-17:15

Panel Name	Contribution Title
1 Eleonora Agus Poletti	Development of a workflow for ITER infrared synthetic diagnostic
2 Farouq Alatassi	Characterisation and Development of CVD Diamond-to-Metal Bonds for Microwave Components in Nuclear Fusion Systems
3 Jerome Alhage	Variability and risk of edge-localized modes at JET using machine learning
	w Modular Load Matching System for W7X ICRH Operation
5 Matīss Sondars	Carbon nanostructure reinforced polymer electrolyte membranes for enhanced electrochemical tritium enrichment
6 Alexander Beale	Extraction of Tritium from the Molten Salt FLiBe and permeation membranes
7 Linnéa Björk	Development of multi-diagnostic Bayesian analysis tool for inference of plasma parameters in the W7-X island divertor
8 Timo Bogaarts	Deterministic Neutronics for Stellarator Deisgn
9 Lorenzo Bramucci	Modelling and Analysis of the MAST-U SUPER-X Divertor using SOLEDGE-3X-EIRENE
10 Marco Bugatti	Experimental Diagnostic Design for Plasma-Wall Interaction
11 Benjamin Burazor Domazet	A highly sensitive Quartz Crystal Microbalance setup for the investigation of first wall materials
12 Gianluca Camera	Electromagnetic loads mapping: the CREATE method
13 Alan Ricardo Cintora de la Cruz	Langmuir wave excitation in a small-scale weakly ionized plasma: a model for solar wind.
14 Mark Cornelissen	Coherence Imaging Spectroscopy to Visualize the Role of Flows in Fusion Devices
15 Beatrix Curtis	Physically Based Crystal Plasticity Modelling of Creep in Grade 91 Steel for Fusion Reactor Materials
16 Freddie Daniels	Simulating polycrystalline superconductors for fusion applications using Time-Dependent Ginzburg-Landau theory
17 Biao Lyu	Segregated and block-coupled approaches for electric coupling in multi-region magnetohydrodynamic flows within fusion liquid metal blankets
18 Marco Neri	An innovative approach to the analysis of the magnetic field in tokamaks with finite elements
19 Charles Edwards	Hydrogen trapping and permeation in metallic and ceramic coatings for fusion powerplant applications
20 Giulia Emma	Beam optics characterization through visible cameras in the ITER prototype negative ion source SPIDER
	c Metallic impurities modeling for the Cold-Trap in the LITEC facility
22 Louis Gayina	Computational Fluid Dynamics for Liquid Metal Flows subject to Magnetic fields.
23 Matteo Grandin	Development of a fast real-time LIUQE surrogatemodel for TCV shape control
24 Aidan Neil	Fuel Retention and Release Mechanisms in Breeder Blanket Materials for Nuclear Fusion Devices
25 Sara Hammoud	Blanket Materials for Nuclear Fusion Devices
26 Qingyun Hu	Integrated modelling of impurity seeding in high-performance deuterium JET and DTT H-mode plasmas
27 Koray Iroc	Comparative Study on Microstructural Response of ITER-Grade Tungsten Under Fusion-Relevant Irradiation Conditions
28 VLADISLAV IVANOV	Application of electron cyclotron emission (ECE) diagnostic for runaway electron measurements
29 Sebastian Konewko	kobra: a new Vlasov code
30 Miriam La Matina	Study of inter-ELM fluctuations in Type-I ELMy plasmas
31 Hannah Lindl	Spectroscopic Characterization of Detachment in Conventional versus Advanced Divertor Configurations
32 Jacopo Lombardo	My PhD Journey
33 Ramon Lopez Cansino	2D impurity flow measurements with CICERS at Wendelstein 7-X
34 Štěpán Malec	The Timepix3 semiconductor pixel detector as runaway electron diagnostics at the GOLEM tokamak
35 Alessandro Mancini	Power exhaust capabilities of Alternative Divertor Configurations at ASDEX Upgrade
36 Álvaro Martínez Pechero	
	OXFORD-UMAT: A Crystal plasticity code for damage evaluation of STEP materials.
37 Kiera McKay	Investigating the pedestal intrinsic torque at the ASDEX Upgrade tokamak Neutron diagnostic systems for pycloor fusion based an diagnostic detectors.
38 Julian Melbinger	Neutron diagnostic systems for nuclear fusion based on diamond detectors Study of feet ions in pen linear MHD event
39 Julio Merchand	Study of fast-ions in non-linear MHD event
40 Lorenzo Milia	Machine Learning for Solving in Real-Time the Inverse Thermal Problem on STRIKE
41 Sara Molisani	Design of a diagnostic to evaluate the ion velocity distributionfunction at the plasma edge of RFX-mod2
42 Carlos Refugio Muñoz García	Mode detection in oversized waveguides using thermal sensors
	ASCOT and FILDSIM modelling for fast-ion loss detector signals in JT60-SA
44 Julia Pérez gonzalez	Obtaining edge main ion density with Charge Exchange Recombination Spectroscopy at ASDEX Upgrade
45 Sonia Pignatiello	MAGNETOHYDRODYNAMIC EFFECTS ON SOLID PARTICLES TRANSPORT IN A LIQUID METAL FLOW FOR FUSION REACTOR APPLICATIONS
46 Joost Prins	Neural Green's Operators for Fusion PDEs
47 Patrick Quigley	The Development of an imaging Heavy Ion Beam Probe for the SMART tokamak
48 Alfonso Rodríguez	Status of the SMall Aspect Ratio Tokamak and achievements of the first experimental campaign
49 William Rudrum	Investigating the Isotope Effect in the Diffusion of Hydrogen Isotopes through Iron and Vanadium
50 Federico Ruffini	Numerical investigation of plasma position reflectometry performance with respect to magnetic curvature
51 Margherita Salerno	Impact of RMPs on plasma rotation
52 Claudia Salvia	Preliminary investigation of a resonant cavity-combiner architecture for Megawatt-class Solid-State amplifier-based ICRH systems in tokamaks
53 Jonatan Schatzlmayr	Towards 3D drift-kinetic transport modeling ofthe electric field in stellarators
54 Vojtěch Smolík	W7-X First Wall Thermal Analysis
55 Riccardo Stucchi	Beat-driven excitation of zonal flows in burning plasmas
56 Mate Szucs	Interplay of 3D MHD with SOL/divertor physics in EDA H-mode and the X-point radiator regime
57 Anna Taipale	Modelling Fracture in Tungsten Microcantilevers with Combined Crystal Plasticity and X-FEM
58 Beatrice Tosto	Real-time implementation of spectroscopy measurements at the ASDEX Upgrade tokamak
59 Dilmurod Tuymurodov	Neutron transport and radioactive processes analysis in particle accelerators and neutron source systems
60 Lucas van Ham	Effect of magnetic fields on particles in the Wendelstein 7-X neutral beam box
61 Lina Velarde	Effect of externally-applied magnetic perturbations on global fast-ion losses in MAST-U via IR thermography
62 Elsa Verheul	Modelling Magnetohydrodynamic Effects on Dendritic Solidification in Fusion Steels during Additive Manufacturing
63 Matthew Warner	Uncertainty analysis of crystal plasticity constitutive laws for fusion materials modelling
64 Sem Zaal	Evolution of surface morphology in materials exposed to hydrogen isotope plasma.