## FuseNet PhD Event 2025 ITER

## Poster Session 2 - Thursday 9:15-10:45

Panel Name	Contribution Title
1 Marcos Arranz	Role of the radial electric field in the confinement of energetic ions and implications for the experimental validation of stellarator optimization
2 Peter Reichel	Material Characteristics of HTS for Fusion Application
3 David Bermúdez	•
	Mechanical Properties of Structural Metallic Alloys for Nuclear Applications Deduced by Three-Point Bend Testing
4 Mattia Bevilcqua 5 Juan Pablo Broude Garcia	Development of an Integrated control and acquisition system for large Langmuir probe arrays in cold plasmas
	Negative ion temperature measurements by cavity ring-down spectroscopy  Preliminary Analysis and Diagnostic Design for Neutral Pressure Investigations at TCV
6 Benjamin Brown	, , , , , , , , , , , , , , , , , , , ,
7 Luigi Cacciapuoti	A novel approach for machine protection systems in nuclear fusion
8 Jan Čečrdle	Modelling of plasma induced liquid metal surface erosionduring transient events
9 Jakub Chlum	3D radiation during shattered pellet injection at ASDEX Upgrade
10 Andrea Ciula	Optimized design and structural verification of modular plasma facing units with tungsten lattice armor for EU-DEMO limiters
11 Alessandro Ciurlino	Development of gamma ray spectroscopy for α particlediagnostics using boron impurities.
12 Albert Civit	3D non-linear non-adiabatic simulation of core density collapse event in LHD plasma
13 Francesco Desana	Performance Evaluation of Supercapacitors for Energy Storage in Tokamak Applications
14 Paulo Figueiredo	Interaction analysis and decoupled control of the power exhaust for nuclear fusion reactors
15 James Carpenter	Initial simulations of core instabilities in MAST-U with the non-linear code JOREK
16 Roman Ghiam	Impurity Transport using Tracer Particles and the Hasegawa-Wakatani Model
17 Federico Guiotto	Development of a GEM based diagnostic with imaging and spectroscopic capabilities for soft X-ray measurements at RFX-mod2
18 Raphael Gurschl	Erosion properties of mixed tungsten and boron layers relevant fornuclear fusion devices
19 Edith Victoria Hausten	Developments in equilibrium reconstruction for the Wendelstein 7-X stellarator
20 Andreas Hentrich	Application of microwave absorbers
21 Sanah Hussain	Influence of Deuterium Gas during Tungsten / Boron Film Deposition
22 Loes Jansen	Nuclear fusion plasma fuelling with ice pellets using aneuromorphic controller
23 Daniil Kabirov	Interaction Between Alfven Eigenmodes and EGAMs in Negative Triangularity Plasmas
24 Simone Kaldas	Scientific Machine Learning in Nuclear Fusion: An Application to Real-Time Multi-Diagnostic Data Processing in Tokamaks
25 Arnaud Lafay Labrosse	Qualitative effects of resistivity on pedestal predictions, implication for ITER
26 ziwei li	Investigation of neutron irradiated nuclear structural materials using Small Punch Test
27 Lukáš Lobko	Direct detection of runaway electrons by in-vessel scintillation probe at the GOLEM tokamak
28 Carlos López Jiménez	Optimizing Injection Geometry and Beam Duct Design for the NBI in the SMART Tokamak
29 Luis Daniel López Rodríguez	Characterization of a microwave reflectometer for edge density profile measurements at the ICRH antenna on Wendelstein 7-X
30 Joey Louwe	Implementation and Performance Evaluation of the New Helium Gas Puff Imaging System MANTIS at W7-X
31 Martijn de Beij	Real-time fusion plasma density estimation at WEST
32 Daniel Medina Roque	Observation of Enhanced Core Impurity Transport in a Turbulence-Reduced Stellarator Plasma
33 Letizia Melaragni	Preliminary analysis of the EM effects of mitigated disruptions in DTT machine
34 Dario Michelon	Listening to the Plasma: Sonification of Magnetic Field Data from RFX-mod2.
35 Simone Mingozzi	On the instabilities of liquid metal free-surface flows for plasma-facing components: effects of a strong transverse magnetic field on the linear stability analysis
36 Maikel Morren	Fast ITG-TEM stability evaluation in arbitrary geometry based on avariational approach
37 Eugenia Obeng-Akrofi	The Political Economy of Energy Transitions: The Role of Fusion on the Climate Change Debate
38 Andrés Orduña Martínez	Installation overview of a multispectral imaging system for runaway electron studies in ASDEX Upgrade
39 David Del Carmen Peña Arévalo	SMART THOMSON SCATTERING DIAGNOSTIC
40 Pasquale Porcu	Magnetic topology and ion dynamics during magnetic reconnections in RFX-mod
41 Patrik Rác	Towards Efficient Accelerated 3D Nonlinear MHD Solvers within the Finite Element Code JOREK
42 Iacopo Regoli	Advancements towards the development and demonstration of HollowCathode discharges for NBI Ion Sources
43 Alex Reyner Viñolas	Development of the ITER fast ion loss detector
44 Sebastian Ruiz	Simulating complex divertor geometries in BOUT++ and Hermes-3
45 Willem Rutten	Towards multidisciplinary optimization for stellarator concept design
46 Lorenzo Saccaro	A fast, multi-machine surrogate model for the ideal no-wall Troyon Beta_N limit
47 Jesús Salas Suárez-Bárcena	Soft x-ray diagnostic implementation in SMART
48 Samuele Setzu	Multi machine disruption prediction
49 Christian Avanzato	Implementation of pressure sensors and fast gas valves in DTT tokamak
50 Daniel Švorc	Integrated modelling of separatrix density using the KN1D and METIS codes
51 Donát Takács	Towards a synthetic database for 2D bolometer tomography in ITER
52 SHAOKAI TANG	Tungsten-Diamond Composite for Plasma-Facing Materials
53 Alessandra Tonel	A multi-machine study of the interaction between locked modes and plasma rotation
54 Marek Tunkl	Runaway Electron Hard X-ray Diagnostics at the GOLEM Tokamak: A Combined Experimental and Simulation Approach
55 Márton Vavrik	Optimizing fuelling pellet injection geometry for COMPASS Upgrade with HPI2
56 Mário Vaz	Characterization of the quasi-coherent mode of EDA plasmas
57 Sreya Viswanathan	An Investigation of electronic stopping of self-lons in Fe for fusion material research
58 Seana Youssefi	A Near-Atomic-Scale Study of the Microstructure and Mechanical Properties of Tungsten and Tungsten-based Alloys
59 Edgard Zuin	Optimizing the ITER heating neutral beam: studies of the source plasma and accelerated beam
60 Chiara De Piccoli	Studying the NBI-ICRH synergy in fusion devices through ASCOT-RFOF code
61 José Ignacio Fernández Gómez	Transport in runaway electron companion plasmas: impact on mitigation and extrapolation to ITER
62 Sofia Maggio	Multiphysics study of nuclear and fluid dynamic performances of DEMO plasma-facing components