

Sherwood 2026 - Poster Session P2

34 posters

Poster	Presenter	Organization	Title
P2.1	Felix I Parra	Princeton Plasma Physics Laboratory	Gradient-driven instabilities in 2D models for tokamak edge
P2.2	Lucas F. McConnell	University of Oxford	Kinetic Effects in the Scrape Off Layer and their Effect on Transport
P2.3	Benjamin D Dudson	Lawrence Livermore National Laboratory	Predictive 3D boundary turbulence simulations
P2.4	Patrick S Kim	Princeton University	The Gyrokinetic Plasma Sheath Transition
P2.5	Jacob R King	Fiat Lux LLC	Enabling High-Fidelity Edge Modeling: Incorporating Atomic Radiation and Performance Portability into the NIMROD Code
P2.6	Chengkun Huang	Los Alamos National Laboratory	Coupled atomic and molecular collisional radiative modeling of tokamak plasma recombination zone
P2.7	Linjin Zheng	The University of Texas at Austin	Resonant magnetic perturbations in the dual q description of plasma edge
P2.8	Marcos X Navarro Gonzalez	University of Wisconsin-Madison	Simulating detachment, heat exhaust, and erosion during impurity seeding in RMP scenarios in DIII-D
P2.9	Feng Zhichen	University of Colorado, Boulder	A coherent structure transport model for scrape-off layer turbulence
P2.10	Fitzpatrick Richard	University of Texas	Response of a magnetically diverted tokamak plasma to a resonant magnetic perturbation
P2.11	Silvia Trinczek	Princeton University / PPPL	Neoclassical transport and profile prediction in transport barriers
P2.13	Livia Casali	University of Tennessee Knoxville	Impact of the isotope mass on divertor detachment and pedestal structure
P2.14	Benjamin T Taczak	University Of Tennessee - Knoxville	SOLPS-ITER and BOUT++ Iterative Coupling (SIBIL) to self-consistently inform 2D anomalous diffusion coefficients
P2.15	Nami Li	LLNL	Zonal Magnetic Fields Quench ELM Avalanches via Dynamic Perturbed Force Balance
P2.16	Bodhi Biswas	Realta Fusion Inc.	Integrated kinetic modeling of WHAM
P2.17	Samuel Frank	Realta Fusion	Recent Progress of the Realta Fusion Theory and Modeling Program
P2.18	Kai Shih	Realta Fusion	Reduced-Geometry Hybrid PIC Modeling of Instabilities in Big Simple Magnetic Mirrors
P2.19	Cole D. Stephens	Realta Fusion	Fast electron basis function for equilibrium reconstruction in axisymmetric mirrors
P2.20	Jonathan Menard	Princeton Plasma Physics Laboratory	Physics design of a Spherical Tokamak Advanced Reactor (STAR)*
P2.21	Richard Nebel	Tibbar Technologies	Advanced Fuel Oscillating Fusion Reactor
P2.22	Stefan Tirkas	Lawrence Livermore National Laboratory	Flux-Coordinate-Independent Extension to BOUT++/Hermes-3
P2.23	Tyler Mark	University of Florida	Multifidelity Surrogates of Runaway Electron Dynamics
P2.24	Nathaniel M Ferraro	Princeton Plasma Physics Laboratory	Mitigating Risks from Abrupt Confinement Loss (MiRACL) FIRE Overview
P2.25	CIHAN AKCAY	General Atomics	The Dudes of Hazard: identifying conditions for mode-locking onset in MAST-U plasmas
P2.26	John M Finn	Tibbar Plasma Technologies, LLC	Analysis of grid instabilities in particle-in-cell codes using a meshfree approach. Part I: Theory

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P2.27	Yashika Ghai	Oak Ridge National Laboratory	Machine learning-based surrogate modeling of energetic particle transport in ITER
P2.28	Samuel W. Freiberger	Columbia University	Nonmodal analysis of the tearing instability
P2.29	Zachary L Daniel	Columbia University	Unsupervised classification of confinement regimes on DIII-D
P2.30	Jonathan S Arnaud	Los Alamos National Laboratory	Physics-constrained deep learning for resistive MHD
P2.32	Preeti Sar	Oak Ridge National Laboratory	Developing a machine learning framework for accurately determining transport fluxes using the quasilinear TGLF model
P2.33	Johannes J van de Wetering	Lawrence Livermore National Laboratory	Neural Operator Transformers for Edge Plasma Turbulence
P2.34	Chris McDevitt	University of Florida	A Deep Learning Framework for Describing Energetic Particle Generation and Confinement in Magnetized Fusion Devices
P2.35	Jesse Viola	Massachusetts Institute of Technology	Bayesian optimization for stellarator coil design
P2.36	Kevin S. Gill	University of Wisconsin-Madison	Fast prediction of plasma instabilities with sparse-grid-accelerated optimized dynamic mode decomposition