

# Sherwood 2026 - Poster Session P3

31 posters

Poster	Presenter	Organization	Title
P3.1	Suying Jin	Massachusetts Institute of Technology	Toward improved modeling of parametric decay instabilities in the lower hybrid frequency range
P3.2	Simone Cavallero	Politecnico di Torino and PPPL	Axisymmetric ( $n=0$ ) Modes in Tokamaks: From Linear MHD Branches to Nonlinear Wave-Particle Dynamics
P3.3	Enac Gallardo-Diaz	LANL	Collisional-Radiative Atomic and Molecular Kinetics (CRAM-K) Model for Simulating Low Temperature Plasmas in Tokamaks
P3.4	Evstati G Evstatiev	Sandia National Laboratories	Analysis of grid instabilities in particle-in-cell codes using a meshfree approach. Part II: Stability of a cold stationary plasma
P3.5	Vasilii Khavin	University of California, San Diego	Stochastic Layer Effects on Drift Kinetic Solutions Near Magnetic Island
P3.6	Golo A. Wimmer	Los Alamos National Laboratory	Scalable Structure-Preserving Finite Element Methods for Fully Implicit Resistive MHD in Realistic Fusion Geometries
P3.7	Björn Zaar	Chalmers University of Technology	An analytical criterion for significant runaway electron generation in activated tokamaks
P3.8	Boris Breizman	Institute for Fusion Studies, UT Austin	Crested stationary spectra of weak turbulence
P3.9	Jack Gabriel	William & Mary	GUERNICA: A continuum kinetic code for neutral dynamics in fusion plasmas
P3.10	Sidney D.V. Williams	University of California San Diego	Decomposing Plasma Turbulence into a Skeleton of Exact Coherent Structures: A Field Theoretic Framework for Transport Prediction
P3.11	Kemal Atay	University of Wisconsin-Madison	Multiscale Gyrokinetic Simulations Across the Reversal Surface in Reversed-Field Pinch Plasmas
P3.12	William Barham	Los Alamos National Laboratory	When symplectic PIC Isn't symplectic
P3.13	Matthew T. Beidler	Oak Ridge National Laboratory	Developing ORNL's VERTEX multiphysics framework for coupled plasma-engineering simulations
P3.14	Dan C Barnes	TAE Technologies	New Darwin energy-conserving PIC algorithm
P3.15	David Arnold	Columbia University	Simulations of sawtoothing activity in the HBT-EP tokamak
P3.16	Gabriel S. Woodbury Saudeau	Auburn University	Detecting and Measuring Magnetic Islands in SIESTA
P3.17	Adam J C Singor	Los Alamos National Laboratory	LANL's Suite of Atomic and Molecular Physics Codes for LTE Opacities and Atomic Collisional-Radiative Modeling
P3.18	Alessandro Zocco	IPP Greifswald	Trapped-electron modification of kinetic ballooning instabilities in general geometry
P3.19	François Waelbroeck	Univ. Texas at Austin	Effect of wake-field drag on thin magnetic islands
P3.20	Mark C Zammit	Los Alamos National Laboratory	High-fidelity electron transport in Monte Carlo simulations using quantum-collision-based models implemented in ThunderBoltz: An open-source 0D direct simulatio
P3.21	Edward A Tocco	University of Maryland	Stellarator optimization using global neoclassical transport simulations
P3.22	Diego del-Castillo-Negrete	University of Texas at Austin	Generative Artificial Intelligence methods for turbulence and kinetic computations
P3.23	Emmanouil G. Drimalas	University of Arizona	Symplectic neural surrogates of charged particle dynamics and acceleration for kinetic plasma simulations
P3.24	Seung-Hoe Ku	Princeton Plasma Physics Laboratory	Mitigation of initial transients in gyrokinetic turbulence simulations using numerical distribution function with neoclassical relaxation

Poster	Presenter	Organization	Title
P3.25	Eamon J Hartigan-O'Connor	Princeton University	Behavior of kinetic instabilities in a dynamically forming resonant distribution
P3.26	Michael J Lavell	Los Alamos National Laboratory	Development of a hybrid fluid-kinetic particle-based model for simulating plasma heating and fueling by neutral beam injection
P3.27	Nikolai Gorelenkov	PPPL	Relaxation of Energetic Particles in Burning Plasma Conditions mediated by Alfvén instabilities and its quasilinear modelling
P3.28	Stephen White		An implicit and conservative low-rank scheme for the kinetic plasma model
P3.29	Arsene T Biwolé	MIT	Asymptotic mass and charge scaling of turbulent impurity transport in tokamaks
P3.30	Orso Meneghini	Proxima Fusion	Adopting IMAS DATA model for stellarators to enable scalable models integration, verification and validation
P3.31	Brady Elster	Auburn University	Linear Tearing Mode Stability with Two-Fluid Equilibrium Flow