## The 2025 Sherwood Conference, Poster Session 2

Date: Tuesday, April 8, 2025 Time: 1:30 PM - 3:30 PM Location: Grand Ballroom

P2.01	Philip Morrison (University of Texas at Austin)	Hamiltonian Stellarator Reduced MHD
P2.02	James Corbett (Stony Brook	Validation Study of PELOTON Rocket Acceleration
	University)	Simulations of SPI in JET
P2.03	Juan Ruiz Ruiz (University of	Zero-frequency zonal modes and predator-prey
	Oxford)	behavior driven by Alfvén eigenmodes in the JET
		tokamak: measurement and gyrokinetic simulations
P2.04	Genia Vogman (Lawrence	Simulation-validated quasilinear model of transport
	Livermore National	without assumptions on the saturated state
	Laboratory)	
P2.05	Jacobo Varela Rodriguez (IFS	Theoretical analysis of the Energetic Particle Mode
	UT-Austin)	decay: frequency down-sweeping and shear flow
		generation
P2.06	Minglei Yang (Oak Ridge	Bayesian optimization of the velocity and spatial
	National Laboratory)	resolution requirements of the Gyro-Fluid-System
		linear eigensolver for NSTX-U pedestal plasmas
P2.07	Bradley Andrew (Auburn)	Using Nonextensive Statistics to Analyze NSTX-U
		Magnetic Islands Created by Nonaxisymmetric Current
		Perturbations and Island Bifurcation
P2.08	Xueqiao Xu (Lawrence	Impact of Impurities on Edge-Localized Modes and
	Livermore National	Turbulence in Tokamak Plasmas
	Laboratory)	
P2.09	Jiheon Song (Hanyang	Quantitative analysis of zonal flow influence in trapped
	University)	electron modes through triad energy transfer
P2.10	Chang Liu (Peking University)	Simulation of Effective Runaway Electron Mitigation
		Using a Passive Coil in J-TEXT Disruptions
P2.11	Ray Mattes (University of	Impact of the isotope mass on divertor detachment
	Tennessee Knoxville)	and pedestal structure
P2.12	Jason Hamilton (Los Alamos	Physics basis of tokamak disruption mitigation via
	National Laboratory)	alignment of thermal and current quenches
P2.13	Marco Onofri (TAE	Simulations of magnetic field reversal by neutral beam
	Technologies)	injection in a mirror-confined plasma
P2.14	Luquant Singh (Type One	Modular Coil Optimization and Design for Project
	Energy)	Infinity Stellarators
P2.15	Austin Welsh (University of	SICAS, a new integrated divertor-SOL-pedestal-core
	Tennessee-Knoxville)	framework for self-consistent modeling of ion and
		impurity transport in fusion devices

P2.16	Brady Elster (Auburn	Equilibrium Two-Fluid Effects on Linear Tearing Mode
	University)	Stability
P2.17	Lucas McConnell Montoya	Highlighting the Importance of Kinetic Effects in the
	(Oxford University)	Scrape-Off-Layer using the Moment Kinetics Code
P2.18	Felix Parra (Princeton Plasma	The kinetic Bohm condition in collisionless and
	Physics Laboratory)	collisional plasmas
P2.19	Mikhail Dorf (Lawrence	Implicit simulations of collisional transport in
	Livermore National	magnetized plasmas with the continuum gyrokinetic
	Laboratory)	code COGENT
P2.20	Benjamin Dudson (Lawrence	Turbulence and transport simulations with Hermes-3
	Livermore National	
	Laboratory)	
P2.21	Michail Anastopoulos Tzanis	Ballooning limit of spherical tokamak pedestals using
	(Oak Ridge National	a novel Gyro-Fluid System model
	Laboratory)	
P2.22	Diego del-Castillo-Negrete	Generative artificial intelligence methods for the
	(University of Texas at Austin)	acceleration of particle-based kinetic computations
P2.23	Federico Halpern (General	Parallel diffusion operator for magnetized plasmas
	Atomics)	with improved spectral fidelity
P2.24	Benjamin Faber (University of	Verification of flux tube gyrokinetic turbulence
	Wisconsin-Madison)	simulations of HSX with global simulations
P2.25	Alan Kaptanoglu (New York	Optimization of passive superconductors for shaping
	University)	stellarator magnetic fields
P2.26	Linjin Zheng (University of	loroidal Alfven eigenmodes in the advanced steady-
<b>DO 07</b>	lexas at Austin)	state-tokamak scenario with negative triangularity
P2.27	Shahihul Islam (Lawrence	Self-consistent simulation of edge plasma transport
	Livermore National	with lithium sources
D2 20	Dominia Dower (Lowronce	Simulations of the "oburning mode" in anowflake
F2.20	Livermore National	divertore
P2 20	Williams Sidney (University Of	Organizing Plasma Turbulance Through Coherent
12.25	California San Diego)	Structures
P2 30	Jacob Halpern (Columbia	What is the Correct Reference Frame for Perturbative
12.00	University)	3D MHD Modeling in Tokamaks?
P2.31	lan Abel (University of	Advances in Gyrokinetic Simulation with the GX Code
1 2101	Maryland, College Park)	
P2.32	Pablo Rodriguez-Fernandez	Accelerating Transport Solvers with Surrogate
	(MIT Plasma Science and	Modeling and Uncertainty Ouantification
	Fusion Center)	
P2.33	Xin Zhang (Tokamak Energy)	Fast physics-based launcher optimization for electron
		cyclotron current drive
P2.34	Daniel Burgess (Columbia	Tearing Stability Prediction Combining Toroidal
	University	Calculations With a Two-Fluid Slab Layer
		Approximation
P2.35	Saurabh Saxena (Princeton	Self-Consistent Bootstrap Current Dynamics in M3D-
	Plasma Physics Laboratory)	C1

P2.36	Matt Beidler (Oak Ridge	Modeling Resilience of Fusion Blankets to Tokamak
	National Laboratory)	Disruptions
P2.37	Gregory Hammett (Princeton	Sheath Resistivity Effects on SOL Instabilities and
	Plasma Physics Laboratory)	Gkeyll Simulations of Edge Turbulence
P2.38	Maxwell Rosen (Princeton	Gyrokinetic studies on the stabilization of high field
	University)	axisymmetric magnetic mirrors
P2.39	Dingyun Liu (Princeton	Gyrokinetic Simulation of ASDEX-Upgrade SOL with
	University)	Implicit Moments-Conserving BGK Collision Operator
P2.40	James Juno (Princeton Plasma	A parallel-kinetic-perpendicular-moment model for
	Physics Laboratory)	magnetized fusion plasmas
P2.41	Brendan Lyons (General	Pulse Design and Digital Twin Capabilities of the FUSE
	Atomics)	Integrated-Modeling Framework
P2.42	Megan Evans (University of	A minimal model for Floquet modes in a tokamak with
	Oxford)	flow and magnetic shear
P2.43	Toby Adkins (Princeton Plasma	The gyrokinetic field invariant and electromagnetic
	Physics Laboratory)	instabilities in 'good-curvature' plasmas
P2.44	Julien Dominski (PPPL)	Validation of gyrokinetic modeling of tungsten peaking
		prediction in the WEST tokamak
P2.45	George Wilkie (Princeton	Neutral recycling physics with OpenMC
	Plasma Physics Laboratory)	
P2.46	Xianzhu Tang (Los Alamos	What radiative plasma modeling informs us on an
	National Laboratory)	alternative path to plasma power and particle exhaust
		in power reactors
P2.47	Yannis Kominis (National	Orbital Spectrum Analysis of Mode-Particle
	Technical University of Athens)	Resonances and Transport Barriers in Tokamaks
P2.48	Miguel Calvo-Carrera	Passing alpha particle collisional transport in
	(Massachusetts Institute of	optimized quasisymmetric stellarators
	lechnology)	
P2.49	Augustus Azelis (University of	Collisionless zonal flow saturation via symmetric
<b>DO 50</b>	Wisconsin-Madison)	dynamics
P2.50	Marcin Kopanski (MIT Plasma	A heuristic model of non-Maxwellian electron
	Science and Fusion Center)	cyclotron emission for investigation of ECE – Thomson
D0 54	Description for a first of the interview.	Scattering discrepancy in Alcator C-Mod
P2.51	Byoungchan Jang (University	Exponential Spectral Scaling: Accelerating Stellarator
	of Maryland)	Boundary Optimization by Reducing Mode Amplitude
	Michael Nestes (University of	Disparity
P2.52	Michael Nastac (University of	Universal fluctuation spectrum of viasov–Poisson
D2 52	Cxioiu)	Lurbulence
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