

Poster Session III ~ 10:00 to 12:00pm ~ Tuesday, April 16, 2019**Room Location: Forrestal Ballroom Salons E-H**

Poster #	Author	Title
P3.001	Alexander Schekochihin	Gyrokinetics of thermalization of turbulent energy in astrophysical plasmas: a fusion-astro synergy success story
P3.002	Michael Hardman	Cross scale interaction mechanisms in coupled electron and ion scale turbulence
P3.003	Adrian Fraser	Role of stable modes in the saturation and transport properties of shear flow turbulence
P3.004	Mike Campanell	Cooling the target plasma to a sub-eV detachment temperature using thermionic electrons
P3.005	Alessandro Geraldini	Kinetic model of grazing-angle magnetic presheaths
P3.006	Tess Bernard	Gyrokinetic continuum simulations of plasma turbulence in the Texas Helimak
P3.007	Ammar Hakim	(Gyro)kinetic simulations of turbulence, shocks and sheaths
P3.008	Noah Mandell	Electromagnetic Continuum Gyrokinetic Turbulence Simulations in the Tokamak Edge
P3.009	Manure Francisquez	Nonlinear model-Fokker-Planck collisions in full-f discontinuous Galerkin kinetics
P3.010	Gregory Hammett	Gyrokinetic turbulence simulations of an NSTX SOL with model geometry, and exponential reconstructions and positivity for discontinuous Galerkin algorithms
P3.011	Valentin Skoutnev	Application of Gkeyll to laser-driven plasmas and astrophysical scenarios: Saturation of Weibel-type instabilities
P3.012	James Juno	Turbulent Dissipation in a Simple Vlasov system
P3.013	Jason TenBarge	A Fully Kinetic Numerical Study of Turbulence in the Swarthmore Spheromak Experiment
P3.014	Ian Abel	On the Forced Motion of Field Lines in a Resistive Plasma
P3.015	Rahul Gaur	Gyrokinetic and Ballooning analysis of high beta ITER equilibria
P3.016	Wendell Horton	RFC Confinement With and Without Toroidal Magnetic Field
P3.017	Hideaki Miura	Current/Interchange Tearing Modes with Hall and FLR across SX into the SOL Plasma
P3.018	Rualdo Soto-Chavez	The Drift-Mirror Plasma Instability in Earth's inner Magnetosphere
P3.019	Hongxuan Zhu	Wave-kinetic calculation of the tertiary instability and the Dimits shift
P3.020	Andrei Smolyakov	On magnetic component of Geodesic Acoustic Modes
P3.021	Federico Halpern	The anti-symmetry approach to plasma fluid simulations
P3.022	Cornwall Lau	Full wave modeling of SOL density fluctuations effects on LH and helicon waves
P3.023	Tonatiuh Sanchez-Vizuet	An un-fitted adaptive hybridizable discontinuous Galerkin solver for axisymmetric plasma equilibrium
P3.024	Ge Dong	Nonlinear dynamics of the Kinetic Ballooning Modes
P3.025	Benjamin Faber	Role of geometry on nonlinear energy transfer in optimized stellarators

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P3.026	Stephen Jardin	A New Explanation of Sawtooth Phenomena in Tokamaks
P3.027	Hong Qin	Drift wave instabilities as triggered by spontaneous parity-time symmetry breaking
P3.028	Jacob Maddox	Energy Transfer through plasmoid reconnection in slab-geometry resistive MHD computations
P3.029	Jeff Parker	Self-consistent coupling of transport with global gyrokinetic turbulence simulations
P3.030	Rupak Mukherjee	Numerical study of 3D MagnetoHydroDynamics: nonlinear Alfvén waves and recurrences
P3.031	Plamen Ivanov	Zonal flow – drift-wave interactions in two-dimensional curvature-driven fluid ITG turbulence
P3.032	Eduardo Rodriguez	Hysteresis phenomena in improved magnetic island RF heating
P3.033	Andrew Powis	Scaling of Spoke Rotation Frequency within a Penning Discharge
P3.034	Mikhail Dorf	Testing and plans for the 5D continuum gyrokinetic code COGENT
P3.035	Peifeng Fan	General field theory and weak Euler-Lagrange equation for classical particle-field systems in plasma physics
P3.036	Rogério Jorge	Theory of the Drift-Wave Instability at Arbitrary Collisionality
P3.037	Zhaoyang Liu	On deterministic nature of intermittent geodesic acoustic mode observed in tokamaks
P3.038	Andre Ganesini Odu	High-Order Accurate Minimally-Dissipative Conservative Finite Difference Methods for 2D+2V Vlasov Simulation
P3.039	Eric Howell	NIMROD Modeling of RMP Footprint Structures in DIII-D
P3.040	Mike Martin	Temperature Screening of Impurities in Stellarators and Tokamaks Deviating from Symmetry
P3.041	Renato Gatto	Fusion Burning in Magnetically Confined Toroidal Plasmas
P3.042	Brendan Lyons	Nonlinear impurity-MHD modeling of disruption mitigation
P3.043	Nathan Garland	The influence of toroidicity and partially ionized atomic impurities on runaway electron avalanche in tokamak plasmas
P3.044	Francesca Poli	The challenges of integrated modeling for discharge prediction and the path to a national effort to Whole Device Model
P3.045	Hankyu Lee	Advanced parallel closures using general moment equations for NIMROD simulations
P3.046	Adrian Fontanilla	Heating and Ablation of High-Z Pellets in High-Temperature Plasmas
P3.047	Jason Parisi	Toroidal and slab ETG dominance in JET pedestals
P3.048	Dhairya Malhotra	BIEST: A fast high-order boundary integral solver for computing stepped pressure equilibria in stellarators
P3.049	Miura Hideaki	Ambient-field-dependence of diamagnetic flow interacting with CITM
P3.050	Qingjiang Pan	Gyrokinetic exact linearized Landau collision operator: conservative formulation and initial implementation

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P3.051	Jeffrey Heninger	Using the G-Transform to Gain Nonlocal Information about the Distribution Function
P3.052	Dylan Langone	Ideal ballooning and gyrokinetic stability of an ultra-high beta equilibrium with the ITER shape
P3.053	Michael Nastac	Fluctuation-Dissipation Relations and Free Energy Spectra in Hermite-Laguerre Gyrokinetic Phase Space
P3.054	Salomon Janhunen	On fluctuations and nonlinear heating of ExB-driven plasmas
P3.055	Jeff Lestz	Comprehensive analytical and numerical study of beam-driven sub-cyclotron frequency Alfvén eigenmodes in spherical tokamaks
P3.056	Xiang Fan	Spontaneous Transport Barriers Quench Turbulent Resistivity in 2D MHD
P3.057	Ilya Kuzichev	PIC simulations of magnetospheric chorus wave generation with 2D TRISTAN-MP code
P3.058	Chris McDevitt	Runaway Generation in Tokamak Plasmas for Large Disruption Relevant Electric Fields
P3.059	Joseph Jepson	NIMROD Modeling of Poloidal Flow Damping in a Tokamak Using a Drift Kinetic Equation Closure Scheme
P3.060	Andrei Khodak	Simulations of plasma interactions with liquid metal plasma facing components
P3.061	Simon Woodruff	Collaborative VR datavis platform for HPC
P3.062	C.Z. Cheng	Theory of Alfvén-Sound Frequency Gaps and Discovery of Alfvén-Sound Eigenmodes in Tokamaks
P3.063	Freidwardt Winterberg	A New Approach to Nuclear Fusion by Inertial Confinement
P3.064	Freidwardt Winterberg	General Relativistic Approach to Inertial Confinement Fusion
P3.065	Julio Herrera-Velázquez	On the problem of equilibrium with flow in toroidal confinement systems and intrinsic rotation CANCELLED
P3.066	Guangzhou Hao	Kinetic effect of anisotropic fast ions on the fishbone instabilities CANCELLED