

Poster Session I ~ March 16 ~ 10:15am to 12:15pm ~ Rosenthal Pavilion, 10th Floor

Poster	Firstname	Lastname	Title
P1.001	Stuart	Hudson	A comparison of linear and nonlinear solutions of MHD equilibria in perturbed cylindrical geometry
P1.002	Samuel	Lazerson	The nonlinear plasma response in the continuously nested flux surface limit
P1.003	Ronald	Waltz	Exploring low-n gyrokinetic simulations
P1.004	Bhimsen	Shivamoggi	Electron Magnetohydrodynamic Turbulence: Universal
P1.005	Cesare	Tronci	Hybrid Vlasov-MHD models
P1.006	A.	Cardinali	Tridimensional Igniting Structures in Fusion Burning Plasmas
P1.007	Sergei	Krasheninnikov	On the vapor shielding of divertor target
P1.008	Silvia	Espinosa	Impurity Density and Temperature Asymmetry and Flow in Tokamak Pedestals
P1.009	Wonjae	Lee	Stability Analysis on Electromagnetic Drift-Kinetic Equation for Arbitrarily Collisional Plasma Blobs
P1.010	Stephen	Jardin	Self-organized stationary states of inductively driven tokamaks
P1.011	Dmitri	Ryutov	Analysing divertor magnetic fields with multiple nulls
P1.012	Timothy	Collart	Representation of Poloidal Asymmetries in Neoclassical Fluid Rotation Calculations in Axisymmetric Tokamaks
P1.013	Weston	Stacey	A Flow Stress-Tensor Formulation of Neoclassical Toroidal Viscosity
P1.014	Cheonho	Bae	An extended investigation on the gyroviscous cancellation mechanism based on a systematic perturbative method
P1.015	Emily	Belli	Collisional Effects on Gyrokinetic Turbulence in Tokamak Edge Plasmas
P1.016	Eric	Howell	Extended MHD Analysis of the Gravitational Interchange
P1.017	Bruno	Coppi	Role of Inertial and Inductive Modes in Magnetic Reconnection Events
P1.018	Dov	Rhodes	Sharp-Boundary Non-Ideal Plasma Response Model with a Ferritic-Resistive Wall
P1.019	Alan	Glasser	Computation of Resistive Inner Region Solutions with the DELTAC Code
P1.020	Bamandas	Basu	Origin of Non-diffusive Angular Momentum Transport and Spontaneous Rotation
P1.021	Di	Hu	Revealing the meaning of the asymptotic matching across the resistive resonant layer in MHD
P1.022	Jesus	Ramos	Axisymmetric Neoclassical Theory for Low-Collisionality Ions to their Second Larmor-Radius Order
P1.023	Andrew	Cole	Forces and torques within layers of driven tearing modes with sheared rotation
P1.024	Peter	Montag	Recently Observed Features of the Quasi-Coherent Mode and Relevant Theory
P1.025	A.	Airoidi	Theoretical Considerations for the High Field Line of Experiments to Investigate Fusion Burning Plasmas
P1.026	Carson	Cook	Analytical theory and numerical investigation of the shear Alfvén continuum in the presence of an island

P1.027	Ian	Abel	Fluid-Kinetic Equations for Edge Simulations
P1.028	Linda	Sugiyama	Role of mode coupling in instabilities of a toroidal plasma
P1.029	John	Berkery	Disruptivity Reduction Plan for NSTX-U, Including Characterization of Causes and Implementation of Kinetic Stability Theory Models
P1.030	Mikhail	Dorf	Simulation of edge plasma transport with the COGENT code
P1.031	Chris	Hegna	On optimizing stellarators to microinstabilities: key geometric quantities
P1.032	Roman	Smirnov	Impurity induced divertor plasma oscillations
P1.033	Vinicius	Duarte	Frequency chirping structures in the line-broadened quasilinear model
P1.034	Tengfei	Tang	Impact of density on the ion diamagnetic stabilizations of edge Peeling/Ballooning modes
P1.035	Jeff	Freidberg	General 3-D stellarator equilibria using the surface current model
P1.036	Antoine	Cerfon	Accurately calculating equilibrium quantities with any Grad-Shafranov solver
P1.037	Animesh	Kuley	Fully kinetic particle simulation of radio frequency waves in toroidal geometry
P1.038	Wenlong	Huang	Theory of mode locking and island suppression by resonant magnetic perturbations in Rutherford regime
P1.039	Hank	Strauss	Wall force and toroidal rotation in disruptions
P1.040	Jsmes	Callen	Modeling of Tokamak Plasmas
P1.041	Phil	Morrison	MHD Stability and Constraints
P1.042	Calvin	Lau	Electrostatic Driftwave Instabilities in Field Reversed Configurations
P1.043	Wenlu	Zhang	Gyrokinetic Particle Simulation of Fast Electron Driven beta-induced Alfvén Eigenmode
P1.044	Jian	Bao	Global particle simulation of lower hybrid wave propagation and mode conversion in tokamaks
P1.045	Swadesh	Mahajan	Plasmas as Quantum Fluids - A Nonlinear Effective Quantum theory of Fluidons
P1.046	Shabbir	Khan	Kinetic full wave analysis of resonant absorption of electromagnetic waves in inhomogeneous plasmas
P1.047	Allen	Boozer	Halo Currents and Their Rotation
P1.048	Kai	Germaschewski	Exploiting the Power of Heterogeneous Computing for Kinetic Simulations of Plasmas
P1.049	Tariq	Rafiq	Statistical Properties of XGC1 ITG Turbulence Data

Poster Session II ~ March 17 ~ 10:15am to 12:15pm ~ Rosenthal Pavilion, 10th Floor

Poster	Firstname	Lastname	Title
P2.001	Huasen	Zhang	Gyrokinetic particle simulation of beta-induced Alfvén-acoustic eigenmode
P2.002	Hua-sheng	Xie	Non-conventional Ballooning Structures for Linear Drift Wave Eigenmode in the Pedestal

P2.003	Wei	Xishuo	Integration of full particle orbit in electricmagnetic field
P2.004	Sara	Moradi	Global vs local gyro-kinetic studies of core micro-instabilities in JET hybrid discharges with ITER like wall
P2.005	Adam	Stahl	Effective critical electric field for runaway electron generation
P2.006	Jacob	King	New Extended-MHD drift-tearing mode dispersion relations: implications and a tool for code verification
P2.007	John	O'Bryan	Numerical Investigation of Spheromak Formation Efficiency
P2.008	Feng	Wang	Fishbone instability and nonlinear dynamics in HL-2A plasmas
P2.009	Tyler	Cote	The effect of strong radial variation of the diamagnetic frequency on two-fluid stabilization of edge localized MHD instabilities
P2.010	Atsushi	Ito	Parameter dependence of two-fluid and finite Larmor radius effects on Rayleigh-Taylor and Kelvin-Helmholtz instabilities in finite beta plasmas
P2.011	Stephen	Abbott	Nonlinear Diamagnetic Stabilization Effects on m=2, n=1 Cylindrical Double-Tearing Modes in Hall MHD Simulations
P2.012	James	Hanson	The Virtual Casing Principle and Helmholtz's Theorem
P2.013	Luca	Guazzotto	Extension of Physics of the MHD Pedestal Formation
P2.014	Caroline	Martins	Helicity Injection Modeling for Steady State Toroidal Plasmas
P2.015	Harold	Weitzner	Ideal MHD non-symmetric toroidal equilibria with good flux surfaces
P2.016	Alexei	Pankin	Understanding the Dynamics of H-mode Pedestal and ELMs in KSTAR Through Extended Plasma Edge Modeling
P2.017	Wendell	Horton	RF Wave Propagation and Scattering in Turbulent Tokamaks
P2.018	Mike	Mauel	Toroidal Confinement without Parallel Current: Interchange and Entropy Modes in a Warm Electron Dipole Plasma
P2.019	Qian	Teng	Magnetic Island Saturation in Different MHD Equilibria
P2.020	Andris	Dimits	Progress On Implicit Coupling Of Fluid-Plasma And Monte-Carlo-Neutral Models For Edge Plasma Simulation
P2.021	Makoto	Hirota	Theoretical description of explosive magnetic reconnection in collisionless two-fluid models
P2.022	Fred	Skiff	Parametric excitation of kinetic modes
P2.023	Jingfei	Ma	The Characteristics of the micro-turbulence in the pedestal region during the inter-ELM phase on DIII-D
P2.024	Olivier	Agullo	Remote generation of magnetic islands in magnetised plasmas by turbulence
P2.025	Joshua	Sauppe	Accounting of Magnetic, Cross, and Kinetic Helicities in Nonlinear Two-Fluid Relaxation Simulations
P2.026	W. W.	Lee	Issues Related to Finite- β Gyrokinetics: 1) MHD and Equilibrium, and 2) Singularly Perturbed Equation
P2.027	Vladimir	Mirnov	Effect of magnetic shear on drift-tearing and resistive drift modes in plasma slab

P2.028	Michael	Halfmoon	Energetic Ion Effects on Linear Tearing Mode Stability
P2.029	Brent	Covele	Investigating the Effects of the X-Divertor Geometry on Detachment Control and Edge Pedestal Integrity in DIII-D
P2.030	Nathaniel	Ferraro	Progress in Modeling Non-Axisymmetric Response in Tokamaks
P2.031	Chang	Liu	Runaway electron distribution functions in momentum space with the synchrotron radiation effect
P2.032	Edward	Startsev	Gyrokinetic simulation of the collisional micro-tearing mode instability
P2.033	Spencer	James	Studying the Interactions Between Microturbulence and the Tearing Mode Via Self-Consistent Simulations
P2.034	David	Smithe	Towards Simulations with Self-Consistent SOL Density Evolution when RF Antennas are Powered
P2.035	Benjamin	Faber	Nonlinear gyrokinetic simulation of long wavelength microturbulence in HSX
P2.036	C Leland	Ellison	Incorporation of Collisional Effects in Variational Algorithms for Guiding Center Test Particle Trajectories
P2.037	Isabel	Krebs	Simulations of sawtooth instabilities in ASDEX Upgrade using the 3D nonlinear two-fluid MHD code M3D-C1
P2.038	Wrick	Sengupta	Closed set of full-f low flow ordered drift kinetic equations to study evolution of profiles
P2.039	Weixing	Wang	Distinct turbulence sources and confinement feature in spherical tokamak plasma regime
P2.040	Alexander	Wurm	Deriving 3D-MHD models with gyroviscous-like contributions using a Hamiltonian and Action Principle Approach
P2.041	Fatima	Ebrahimi	Plasmoids formation during helicity injection for startup in toroidal fusion plasmas
P2.042	Young-Dae	Jung	Plasma shielding effects on anti-screening channels for ion-ion collisional excitations in nonthermal plasmas
P2.043	C.	Sovinec	Axisymmetric Vertical-Displacement Event Modeling with NIMROD
P2.044	Jonathan	Hebert	Investigating Ohmic Drive Onset Dynamics in CTH Using NIMROD
P2.045	Nicholas	Roberds	Simulation of a Disruption Using NIMROD
P2.046	Thomas	Jenkins	NIMROD Modeling of Sawtooth Modes Using Continuum and Hot-Particle Closures
P2.047	Eric	Held	Energetic particle physics in NIMROD using a continuum approach
P2.048	Scott	Kruger	Edge harmonic oscillation studies with the NIMROD code
P2.049	Myoung-Jae	Lee	Geometric effects on the dust acoustic surface waves in a Lorentzian dusty plasma slab

Poster Session III ~ March 17 ~ 1:45pm to 3:45pm ~ Rosenthal Pavilion, 10th Floor

Poster	Firstname	Lastname	Title
P3.001	Joseph	McClenaghan	Gyrokinetic particle simulation of current-driven instabilities in fusion plasmas

P3.002	Yao	Zhou	Variational integration for ideal MHD: Implementation and preliminary results
P3.003	Mark	Cianciosa	Advances in 3-D Equilibrium Reconstruction using V3FIT
P3.004	Eliezer	Hameiri	Ballooning modes for rotating accretion discs including dissipation
P3.005	Nikolai	Gorelenkov	Numerical treatments of fast ion anisotropy and toroidal flow in plasma equilibrium problem
P3.006	François	Waelbroeck	Nonlinear theory of Alfvén resonances
P3.007	Linjin	Zheng	Free boundary ion temperature gradient mode theory and the nonneutral effects
P3.008	Jungpyo	Lee	The effect of strong toroidal flow shear on MHD equilibrium in a tokamak
P3.009	Meng	Li	Modeling of Continuum Absorption of Alfvénic Modes in a Torus
P3.010	Alan	Turnbull	External Kink Mode in Diverted Tokamaks
P3.011	Abhay	Ram	Scattering of radio frequency waves by density filaments and fluctuations
P3.012	Zhixin	Lu	Effects of q-profile structure on intrinsic torque reversals
P3.013	Robert	Hager	Total-f gyrokinetic study of bootstrap current in edge pedestal and a novel analytic formula
P3.014	Dylan	Brennan	Simulations of radiation driven islands at the density limit
P3.015	Ryan	White	Resistive Instabilities with Equilibrium Rotation and Velocity Shear
P3.016	Ben	Zhu	Nonlinear Stabilization of the Kelvin-Helmholtz Instability in Magnetized Plasma
P3.017	Jianying	Lang	Verification of gyrokinetic-fluid hybrid electromagnetic modes in the total-f gyrokinetic code XGC1
P3.018	Po-Yen	Lai	Computational and theoretical study of discrete particle effect in a one-dimensional plasma based on Krook collisions - in honor of Norman Rostoker
P3.019	John	Canik	Simulating the effect of improved PMI models with SOLPS
P3.020	Salomon	Janhunen	ITG turbulence in coupled XGC1-XGCa multiscale simulations
P3.021	Chris	Hansen	MHD Simulations of Plasma Dynamics in Devices With Non-Axisymmetric Boundaries
P3.022	Aditya	Krishna Swamy	Gyrokinetic Global Linear Aspects of Microtearing Modes in Large Aspect Ratio Tokamaks
P3.023	Ioannis	Keramidas Charidakos	A Hamiltonian Five Field Gyrofluid Model
P3.024	Eric	Shi	Recent Results from the Gkeyll Discontinuous Galerkin Kinetic Code
P3.025	Gregory	Hammett	Scrape-off-Layer ELM Heat Pulse Results from the Gkeyll Discontinuous Galerkin Kinetic Code
P3.026	Gian Luca	Delzanno	Dust transport in tokamaks: beyond the Orbital-Motion-Limited theory
P3.027	Manure	Francisquez	Global reduced two-fluid studies of tokamak edge turbulence
P3.028	T.	Xie	The ballooning theory with weak up-down asymmetric mode structure and its numerical verification

P3.029	Joshua	Burby	Hamiltonian formulation of the gyrokinetic Vlasov-Maxwell equations
P3.030	Bo	Li	Self-consistent simulation of plasma edge turbulence in L-mode
P3.031	John	Wright	Coupling an ICRF core spectral solver to an edge FEM code
P3.032	Dmitri	Ryutov	Analysing divertor magnetic fields with multiple nulls
P3.033	Brendan	Lyons	Progress on and plans for DK4D: a time-dependent, axisymmetric drift-kinetic equation solver
P3.034	Maurizio	Ottaviani	Applications of asymptotic-preserving (AP) methods to plasma dynamics simulations at realistic dimensionless parameters
P3.035	Ihor	Holod	Stability threshold of kinetic-ballooning mode in DIII-D tokamak pedestal
P3.036	R.P.	Sharma	Kinetic Alfvén wave turbulence in intermediate beta plasmas
P3.037	Barbara	Momo	Spectral properties of VMEC equilibria
P3.038	Anji	Zaho	Huygens' principle-based wavefront tracing in non-uniform media
P3.039	Dmitri	Orlov	Numerical Modeling of RMP ELM Suppression with Incomplete I-coil set in DIII-D
P3.040	Xianzhu	Tang	The plasma physics of particle and energy exhaust in a fusion device
P3.041	Wenlu	Zhang	Validation of Energetic-Particle Turbulent Transport in DIII-D Experiment