

### **Poster Session 3 (Tuesday, 5 April 2022, 4:00PM - 6:00PM)**

1. Phil Snyder (ORNL) - Physics of the Tokamak Pedestal, and Implications for a Fusion Pilot Plant
2. Michael Halfmoon (U. of Texas, Austin) - Analysis of gyrokinetic microinstabilities driving anomalous losses in DIII-D pedestal region
3. Plamen Ivanov (U. of Oxford) - Dimits transition in three-dimensional ion-temperature-gradient turbulence
4. Sebastian De Pascuale (ORNL) - Acceleration of SOLPS-ITER Simulations with Data-Driven Projective Integration
5. Thomas Jenkins (Tech-X Corporation) - Coupled UEDGE/Vorpal modeling of RF-induced ponderomotive effects on edge and SOL transport
6. Jessica Li - Princeton Plasma Physics Lab - Suppression of Microinstability-Driven Turbulence in Negative Triangularity Toroids
7. Juan Losada - UiT The Arctic University of Norway - Stochastic modelling of filament structures, intermittent fluctuations and broad average profiles at the boundary of magnetically confined plasma
8. Bindesh Tripathi - University of Wisconsin-Madison - Transport reduction in forced shear layers due to stable modes
9. Sorah Fischer - CUNY City College - A multi-species plasma transport simulation for stellarators
10. Djin Patch - PPPL - MUSE: an optimized quasi-symmetric stellarator with simple coils
11. Chen Zhao - PPPL - Disruption simulation with pellet injection and runaway electrons
12. Fatima Ebrahimi - Princeton Plasma Physics Laboratory/Princeton Univ - Theory of nonlinear ELMs as reconnection bursts
13. Philip Morrison - University of Texas at Austin - On a computable model for testing assumptions of plasma kinetic theory
14. Stuart Hudson - PPPL - Connecting the plasma to the world
15. Paul Tranquilli - Lawrence Livermore National Laboratory - Deterministic verification for particle-in-cell algorithms using the method of manufactured solutions
16. Roman Samulyak - Stony Brook University - Lagrangian Particle Simulations of Pellets and SPI into Runaway Electron Beam in ITER

17. Ben Zhu - Lawrence Livermore National Laboratory - Development of Model-based Divertor Detachment Prediction
18. Menglong Zhao - Lawrence Livermore National Lab - Bifurcation solutions in the tokamak scrape-off layer w/o the presence of supersonic transition
19. Tyler Cote - Oak Ridge Associated Universities - Comparison of DIII-D and AUG pedestal ballooning stability during 3D magnetic perturbations
20. Cole Stephens - Institute of Fusion Studies, University of Texas a - Energetic particle destabilization of toroidal Alfvén eigenmodes with steep pedestal gradients
21. Chris Hansen - University of Washington - Development and validation of tools for magnetized plasmas in fusion devices with 3D structural features
22. Javier Maurino - Univ. of Oxford - Effect of turbulence on the neoclassical momentum fluxes and current drive
23. Hongxuan Zhu - PPPL - Quantitative measurements of ion orbit loss from gyrokinetic simulations
24. Elizabeth Paul - Princeton University - Department of Astrophysical - Energetic particle transport in 3D magnetic fields: Loss mechanisms and optimization strategies
25. Matthew Poulos - Princeton Plasma Physics Laboratory - Nonlinear features arising from radio-frequency sheath boundaries in magnetized plasmas
26. Valeria Ricci - CNR - Magnetic Reconnection Driven by Thermal and Non-thermal Particle Energy Densities
27. Wrick Sengupta - Princeton University - On-axis magnetic shear
28. David Smithe - Tech-X Corporation - Benchmarking of the Time-Domain RF Sheath Algorithm in the VSim software
29. Henry Strauss - HRS Fusion - Thermal quench in JET and DIII-D disruptions
30. Benjamin Sturdevant - Princeton Plasma Physics Laboratory - Eliminating finite-grid instabilities in gyrokinetic particle-in-cell simulations
31. George Vahala - William & Mary - Qubit Lattice Algorithms for Electromagnetic Wave Scattering from Two Dimensional Scalar Dielectric Objects
32. George Wilkie - Princeton Plasma Physics Laboratory - Nonlinear collision processes with neutrals in kinetic simulations of edge plasma

33. Jong-Kyu Park - Princeton Plasma Physics Laboratory - Parametric dependencies of resonant field penetration across linear two-fluid drift MHD regimes

34. Felix Parra - Princeton Plasma Physics Laboratory - Finite orbit width effects in large aspect ratio stellarators

35. Priyanjana Sinha - Princeton Plasma Physics Laboratory - Neoclassical transport due to resonant magnetic perturbations in DIII-D