Poster Session 2 (Monday, 4 April 2022, 4:00PM - 6:00PM)

1. Steven Sabbagh (Columbia University / PPPL) - Tokamak Disruption Event Characterization and Forecasting Research and Expansion to Real-Time Application

2. Yanzeng Zhang (LANL) - Cooling flow regime of a plasma thermal quench

3. Robert Hager (PPPL) - Electromagnetic total-f simulation of diverted edge plasma in the gyrokinetic particle-in-cell code XGC

4. Taweesak Jitsuk - University of Wisconsin-Madison - Saturation-Channel Selection Rules for Toroidal and Slab ITG Turbulence

5. Tyler Markham - Utah State University - Relativistic, Continuum Drift-Kinetic Capability in the NIMROD Plasma Fluid Code

6. Alexandre Sainterme - University of Wisconsin-Madison - Nonlinear MHD Simulations of a Tokamak Current Quench using the Fluid Runaway Electron Model in NIMROD

7. Sage Stanish - College of William and Mary - Topological Data Analysis and its Application to Drift Wave Turbulence

8. Trevor Taylor - Utah State University - Serendipity shape functions in NIMROD's delta-f PIC approach to energetic particle physics

9. Stefan Tirkas - University of Colorado, Boulder - Gyrokinetic Simulations of Zonal Flow Generation by Intermediate-Scale Electron Temperature Gradient Turbulence in Tokamak Plasmas

10. Silvia Trinczek - Rudolf Peierls Centre for Theoretical Physics, Uni - Finite orbit width effects on neoclassical transport in large aspect ratio tokamaks

11. Wenhao Wang - University of California, Irvine - Simulation of 2D electrostatic presheath potential in the SOL of FRC

12. Rahul Gaur - University of Maryland, College Park - Linear stability of ultra high-beta equilibria

13. Carl Sovinec - University of Wisconsin-Madison - Verification and Pre-Processing Development for NIMSTELL

14. Andrew Spencer - Utah State University - Time advance schemes for continuum drift kinetics and extended MHD

15. Denis St-Onge - University of Oxford - Intrinsic rotation driven by the radial variation of turbulence intensity

16. Linda Sugiyama - MIT - Current ramp and startup of high field DT fusion burning

17. Xianzhu Tang - Los Alamos National Laboratory - Progress by the Tokamak Disruption Simulation (TDS) SciDAC Project on Disruption Mitigation

18. Pallavi Trivedi - Princeton Plasma Physics Laboratory - Modelling of core-edge coupling between delta-f and total-f gyrokinetic model in the XGC code

19. Andrew Ware - University of Montana - Three-Dimensional, Finite-Beta, MHD Equilibria

20. Xishuo Wei - University of California, Irvine - Verification of a fully-kinetic ion simulation model for high-frequency electromagnetic waves in toroidal geometry

21. Linjin Zheng - The University of Texas at Austin - Plasma rotation effects on the resistive wall modes in the negative triangularity tokamaks

22. Matthew Beidler - Oak Ridge National Laboratory - Role of the avalanche source in wall heating during an unmitigated runaway electron final loss event in DIII-D

23. Alessandro Cardinali - ENEA - Non-thermal (“Cool”) Fusion Burning Plasma Regimes

24. CHIPING CHEN - Beyond Carbon Energy, LLC - Energy confinement time in a magnetically confined thermonuclear fusion device

25. Junyi Cheng - University of Colorado at Boulder - Transport barrier for spinning blobs in magnetically confined plasmas

26. Bruno Coppi - MIT - New Mesoscopic Modes Associated with Impurity Populations

27. Bruno Coppi - MIT - Theoretical Formation and Ejection of Double Helix Plasma Structures and Recent Observations on Astrophysical Jets

28. Milan Holec - Lawrence Livermore National Lab - Energy and Enstrophy Conserving High-Order Temporal-Spatial Method for Drift -Reduced MHD

29. Yi-Min Huang - Princeton University - Numerical study of delta-function current sheets arising from resonant magnetic perturbations

30. Salomon Janhunen - Tokamak Energy Ltd - Gyrokinetic analysis of plasmas in the ST40 spherical tokamak

31. Nami Li - LLNL - Characteristics of grassy ELMs and its impact on the divertor heat flux width

32. Chris McDevitt - University of Florida - Phase Space Evolution of a Runaway Electron Population during Rapid Termination Schemes

33. Jason Parisi - Princeton Plasma Physics Laboratory - Three-Dimensional Inhomogeneity of Electron-Temperature-Gradient Turbulence in the Pedestal

34. Lee Ricketson - Lawrence Livermore National Laboratory - Implicit, asymptotic-preserving and energy-conserving time integration for charged particle motion in arbitrary electromagnetic fields

35. Bhimsen Shivamoggi - University of Central Florida, - Stellar Rotation and Polytropic Gas Effects on the Stellar Wind