## AAPPS-DPP2025 Plenary Speakers

## 2025.06.02 AAPPS-DPP Program Committees

CD: Vladimir Rosenhaus CUNY

Theory of wave turbulence

CD: Ting Long Southwestern Institute of Physics Studies of cross phase in turbulent Reynolds stress and particle flux in the edge of tokamak plasma

CD: Julian Mak HKUST Relaxation and equilibration of baroclinic flows F: Anna Tenerani The University of Texas at Austin Compressible effects in solar wind turbulence

F: Colin Roach UK Atomic Energy Authority Recent Progress in our Understanding of Electromagnetic Turbulence in a Conceptual Spherical Tokamak FPP (STEP)

F: Mahendra Verma IIT, Kanpur Kolmogorov-like turbulence in magnetohydrodynamics
B1: Haiqing Liu Institute of Phasma Physics, CAS Progress on Burning Plasma Diagnostic Design for CFEDR

B1: Takahiro Miyoshi Hiroshima University The HLLD solver: 20 years and beyond

B1: Brendan C. Lyons General Atomics Pulse Design and Digital Twin Capabilities of the FUSE Integrated-Modeling Framework

B2: Edward Thomas Auburn University Magnetization of electrons and ions and their influence on dusty plasmas

B2: Lorin Matthews Baylor University Charging and Transport of Dusty in Plasma: beyond the basics

B2: Yan Feng Soochow University From supercritical transition of dusty plasmas to diffusion mechanism of 2D fluids
A1: Ya Zhang Wuhan University of Technology Numerical Study of RF Plasmas using PIC/MCC Simulations with External Circuitry

A1: Erik Wagenaars University of York Towards control of plasma chemistry in low-temperature plasmas

A1: Ramses Snoeckx Empa, Kinetic and thermodynamic insights into plasma-based gas conversion

A2: Bornali Sarma University of Delhi Fabrication of TENG inspired Ag-Cu coated banana fabric textile for wearable and sustainable Bio Sensor adopting plasma sputtering technology

A2: Kamatchi Sankaranarayanan IASST Synergistic Integration of Biophysics and Plasma Physics: Advancing Biomolecular Applications with Cold Plasma Technology

A2: Joanna Pawlat Lublin University of Technology Application of Non-Thermal Plasma in Food Treatment and Biological Material Conditioning

L1: Tobias Dornheim CASUS Görlitz and Helmholtz Toward predictive first principle simulations of warm dense matter

L1: Alexey Arefiev University of California San Diego Exploring new physics regimes with ultra-high-intensity laser-plasma interactions

L1: Natsumi Iwata The University of Osaka Mesoscale laser plasma physics explored by kJ petawatt lasers

L2: Gianluca Gregori Oxford U Laboratory astroparticle physics: from the stability of laboratory blazar's jets to heavy axion searches

L2: Jamie Rosenzweg UCLA Plasma Wakefield Accelerators in Application: the Road to Discovery Science

L2: Min Chen Shanghai Jiao Tong university Laser wakefield based axion-like particle generation and detection

SG: Linghua Wang Peking University Interplanetary energetic electrons

SG: Xinlin Li

University of Colorado Boulder

The Continuing Journey of REPTiles (Relativistic Electron and Proton Telescope Integrated Little Experiments): Achievements and Future Impact

SG: Nareshpal Saini Guru Nanak Dev University, Amritsar Breather Structures and Peregrine Solitons in a Polarized Space Dusty Plasma

SA: Mark Cheung CSIRO Space & Astronomy Data-driven Modelling of Solar Eruptive Flares

SA: Hiroya Yamaguchi JAXA/ISAS X-Ray Imaging and Spectroscopy Mission (XRISM): High-Resolution Spectroscopy of Astrophysical Plasmas

SA: Ying Li Purple Mountain Observatory, CAS The solar white-light flares observed by ASO-S

MF1: Wei Chen Southwestern Institute of Physics Density Limit Disruption Induced by Core-localized Alfvenic Ion Temperature Gradient Instabilities on HL-2A

MF1: Felix Warmer
Max Planck Institute for Plasma Physics
MF1: Yasushi ONO
University of Tokyo
MF2: Francesco Romanelli
Universita' degli Studi di Roma

Latest performance achievements of the Wendelstein 7-X Stellarator
Magnetic Reconnection for Fusion Plasma Ignition and Current Drive
DTT a facility to investigate heat exhaust solutions for fusion power plants

MF2: Andreas Kirschner Forschungszentrum Jülich GmbH Review of prompt redeposition in fusion devices with focus on tungsten-based plasma facing components

MF2: Felix Parra Princeton Plasma Physics Laboratory Finite gyro-radius and mean-free-path layers on tokamak walls