

Sunday, April 6 2025

3:00 pm - 6:00 pm On-Site Registration - Mezzanine
5:00 pm - 7:00 pm Sherwood Reception - Crystal Ballroom

Monday, April 7 2025

8:15 am - 8:30 am Welcome and Announcements

Invited Session 1 - Crystal Ballroom Chair: Elizabeth Paul (Columbia)

8:30 am - 9:00 am Matt Landreman (Maryland) How does ion temperature
gradient turbulence depend
on magnetic geometry?
Insights from data and
machine learning

9:00 am - 9:30 am Jonathan Arnaud (U. Florida) Leveraging Physics-
Constrained Deep Learning
to Accelerate Integrated
Modeling of Tokamak
Disruptions.

9:30 am - 10:00 am Ben Zhu (LLNL) Bifurcation and hysteresis in
global and local edge
turbulence simulations

10:00 am - 10:30 am Coffee Break - Mezzanine
10:30 am - 12:30 pm Poster Session 1 - Grand Ballroom
12:30 pm - 2:00 pm Lunch Break (on your own)
2:00 pm - 3:00 pm Travel to Columbia University
3:00 pm - 6:00 pm Columbia Reception and Plasma Lab Tour ([Registration](#))
6:00 pm - 7:00 pm Return Travel to The New Yorker Hotel

Tuesday, April 8 2025

Invited Session 2 - Crystal Ballroom Chair: Timothy Stoltzfus-Dueck (PPPL)

8:30 am - 9:30 am Nadir Jeevanjee (NOAA
Geophysical Fluid Dynamics
Laboratory) New insights into the CO₂
greenhouse effect

9:30 am - 10:00 am Noah Mandell (Type One
Energy) Turbulence-based predictions
of core plasma performance
for the Infinity Two stellarator
Fusion Pilot Plant

10:00 am - 10:30 am Coffee Break - Mezzanine

Panel Discussion - Crystal Ballroom

Chair: Eva Kostadinova (Auburn)

10:30 am - 12:00 pm	Panelists: Fatima Ebrahimi (PPPL), Sam Frank (Realta), Dave Gates (Thea), Pablo Rodriguez-Fernandez (MIT)	The role of theory and computation in advancing the FPP
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12:00 pm - 1:30 pm	Lunch Break (on your own)
1:30 pm - 3:30 pm	Poster Session 2 - Grand Ballroom
3:30 pm - 4:00 pm	Beverage Break
4:00 pm - 6:00 pm	Poster Session 3 - Grand Ballroom
7:00 pm - 9:00 pm	Banquet and Student Poster Awards – Crystal Ballroom

Wednesday April 9 2025

Plenary/Invited Session 3 - Crystal Ballroom

Chair: Fatima Ebrahimi (PPPL)

8:30 am - 9:30 am	Jon Menard (PPPL)	Open science issues for compact high-performance steady-state fusion pilot plants
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9:30 am - 10:00 am	Matt Beidler (ORNL)	Modeling Resilience of Fusion Blankets to Tokamak Disruptions
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10:00 am - 10:30 am Coffee Break - Mezzanine

Invited Session 4 - Crystal Ballroom

Chair: François Waelbroeck (UT Austin)

10:30 am - 11:00 am	Peter Catto (MIT)	What Landau Missed
11:00 am - 11:30 am	Michael Nastac (Oxford, UK)	Universal fluctuation spectrum of Vlasov–Poisson turbulence
11:30 am - 12:00 pm	David Hosking (Princeton)	Metastable states of a rotating Z-pinch

12:00 pm - 1:30 pm Lunch Break (on your own)

Invited Session 5 - Crystal Ballroom

Chair: Alex Schekochihin (Oxford)

1:30 pm - 2:00 pm	Jeff Candy (GA)	A New Paradigm for Global Gyrokinetic Turbulence
2:00 pm - 2:30 pm	Toby Adkins (PPPL)	The gyrokinetic field invariant and electromagnetic instabilities in 'good-curvature' plasmas
2:30 pm - 3:00 pm	Coffee Break - Mezzanine	
Invited Session 6 - Crystal Ballroom		Chair: Felix Parra (PPPL)
3:00 pm - 3:30 pm	Thomas Foster (Princeton)	Alpha-particle orbits near rational flux surfaces in stellarators
3:30 pm - 4:00 pm	Eduardo Lascas Neto (UW Madison)	Direct optimization of the radial electric field profile in stellarators
4:00 pm - 4:15 pm	Closing Remarks	