Multi-Fidelity Methods for Fusion Energy

Thursday March 19, 2026

3:30–4:30 **Christopher Holland** (University of California, San Diego (UCSD))
Building a fusion power plant: finding a balance of physics and engineering

Tuesday March 31, 2026

2:00–3:00 **Boris Kramer** (University of California San Diego)
Learning Models from Data with Operator Inference

Tuesday April 7, 2026

2:00–3:00 *Mana Francisquez (PPPL) Title: Novel discontinuous Galerkin algorithms for high dimensional PDEs, and their use for gyrokinetic modeling of fusion plasmas*

Thursday April 9, 2026

2:00–3:00 **Wei Guo** (Texas Tech University)
Unlearning Noise in PINNs: A Selective Pruning Framework for PDE Inverse Problems

Tuesday April 21, 2026

2:00–3:00 **Tim Wildey** (Sandia National Laboratories)
Measure-Theoretic and Multi-fidelity Approaches for Solving Stochastic Inverse Problems

Thursday April 23, 2026

2:00–3:00 **Juntao Huang** (University of Delaware)
Hyperbolic Machine Learning Moment Closures for Kinetic Equations

Tuesday April 28, 2026

2:00–3:00 **Phil Travis** (Ergodic)
Inferring trends and optimizing plasmas in the Large Plasma Device using machine learning

Thursday April 30, 2026

2:00–3:00 **Young Dae Yoon** (Pohang University of Science and Technology (POSTECH))
The canonical vorticity formulation of magnetic reconnection and PINN-enabled reconstructions