

TIME	TITLE	PRESENTER
8:15-8:30AM	INTRODUCTION	Karen Willcox
8:30-9AM	Machine Learning for Climate Modeling	Laure Zanna
9-9:30AM	Science Informed Forecasting from Data for Scientific Problems	Henry Abarbanel
9:30-10AM	Physics-aware AI for Dynamical Systems	Amit Chakraborty
10-10:30AM	Enabling approaches for real-time deployment, calibration, and UQ for digital twins	Tan Bui
10:30-11AM		BREAK
11-11:30AM	Neural surrogates for Bayesian inversion, optimal experimental design, and optimal control under uncertainty	Omar Ghattas
11:30-12PM	The Lavrentiev phenomenon and neural networks	Stephan Wojtowysch
12-12:30PM	Deep neural operators with reliable extrapolation for multiphysics, multiscale, & multifidelity problems	Lu Lu
12:30-1:30PM		LUNCH
1:30-2PM	The passive symmetries of machine learning	Soledad Villar
2-2:30PM	Coupling adaptive sampling and training with Neural Galerkin schemes for high-dimensional evolution equations	Benjamin Peherstorfer
2:30-3PM		BREAK
3-3:30PM	Data driven modeling of unknown systems via flow map learning	Dongbin Xiu
3:30-4PM	Building Robust Digital Twin	Alberto Ferrari
		DAY 1 ADJOURNED

TIME	TITLE	PRESENTER
8:30-9AM	Some old and some newer thoughts in data-driven complex systems modeling	Yannis Kevrekidis
9-9:30AM	Harnessing machine learning to study star formation	Stella Offner
9:30-10AM	Fokker-Planck-inverse reinforcement learning: A PDE-guided AI approach to inferring cell behavior	Krishna Garikipati
10-10:30AM		BREAK
10:30-11AM	Machine Learning for Decision Support under Subsurface Uncertainty	Xiao-Hui Wu
11-11:30AM	Sparse Random Feature Models and Applications in Music and Epidemiology	Giang Tran
11:30AM-12PM	A Proposed Benchmark for High Dimensional Scientific Machine Learning	Ian Sloan
12-1PM		LUNCH
1-1:30PM	Foundations and Applications of Operator Learning	Nicholas Nelsen
1:30-2PM	Operator approximation based on deep learning of Green's functions	Serge Prudhomme
2-2:30PM	From large-sample hydrology to hyper-resolution hydrological models: The role of graph neural networks	Alexander Sun
2:30-3PM	TBA	Sergey Fomel
3-3:30PM	Matrix sketching for efficient tensor decomposition	Tammy Kolda
		WORKSHOP ADJOURNED