



# SAMM 2020: Learning Models from Data

## Monday, July 27, 2020

### Posters 1 (7:30 PM - 8:30 PM)

time	[id] title	presenter
7:30 PM	[M4] Optimizing Intense Laser-Plasma Interactions with Evolutionary Algorithms and Machine Learning	SMITH, Joseph
7:30 PM	[M1] Solving Allen-Cahn and Cahn-Hilliard Equations using the Adaptive Physics Informed Neural Networks	Mr WIGHT, Colby
7:30 PM	[M28] Learning Constitutive Relations using Symmetric Positive Definite Neural Networks	XU, Kailai
7:30 PM	[M109] Nonlinear model reduction for one-dimensional solidification process in additive manufacturing	KHODABAKHSHI, Parisa
7:30 PM	[M5] Analysis of bubble dynamics using data-driven dynamical systems and machine learning	Mr GIBSON, Andrew J.
7:30 PM	[M102] Analyzing the Transition to Buffeting of a 2D Airfoil using the Dynamic Mode Decomposition	Mr DIAS, Sathsara
7:30 PM	[M45] Discovering the governing PDE of an active nematic system from video data	ROBERTSON, Connor
7:30 PM	[M107] Extrapolating Nuclear Masses using Bayesian Gaussian Process Regression	Mr JAIN, Rahul
7:30 PM	[M3] System Identification by Sparse Bayesian Learning	SUN, Luning
7:30 PM	[M10] Machine learning for parameters identification in structural joints models	GALLAS, Simone
7:30 PM	[M2] Analytical and Learning Model of a Hybrid-Fluidic Elastomer Actuator for Reliable Control and Perturbation Detection	YOO, Uksang
7:30 PM	[M2] An optimization-based approach for the reduction of parametrized conservation laws with discontinuities	Mrs ALIREZA MIRHOSEINI, Marzieh
7:30 PM	[M1] Analytical Modeling and Evaluation of Curvature-Dependent Distributed Friction Force in Tendon-Driven Continuum Manipulators	Mr LIU, Yang
7:30 PM	[M101] Learning the Interfacial Area Equation from Data	CHEN, Stephen
7:30 PM	[M5] Analytical and Data-driven Models to Predict Algae Biofilm Growth in Water Treatment	JONES, Gerald
7:30 PM	[M29] PhyGeoNet: Physics-Informed Geometry-Adaptive Convolutional Neural Networks for Solving Parametric PDEs on Irregular Domain	GAO, Han
7:30 PM	[M6] MUQ-hIPPYlib: A Bayesian Inference Software Framework Integrating Data with Complex Predictive Models under Uncertainty	KIM, Ki-Tae
7:30 PM	[M3] Learning age-related chronic disease progression from cognitive measurements	OROZCO BOHORQUEZ, Cindy Catherine
7:30 PM	[M1] Modulus-based iterative methods for constrained $\ell_p$ - $\ell_q$ minimization	Dr PASHA, Mirjeta
7:30 PM	[M9] A function space random feature model for PDE solution maps	NELSEN, Nicholas H.
7:30 PM	[M6] Weak SINDy: Galerkin-Based Data-Driven Model Selection	MESENTER, Daniel