

Master Seminar 2019: Machine Learning in Physics Schedule

Name	Topic	Day of Presentation
Tobias Martiné	Basics of machine learning	28. Okt
Alex Matskevych	Training a network (backpropagation)	28. Okt
Finn Kohl	high-bias, low-variance introduction to Machine Learning for physicists	04. Nov
Alexander Jäger	Hopfield Neural Networks (canceled)	04. Nov
Kefei Zou	Unsupervised Learning and Generative Models	11. Nov
Ruoyu Xing	Deep Boltzmann Machines	11. Nov
Konstantinos Mavridakis	Statistical mechanics of machine learning	18. Nov
Danny Pingitzer	Variational inference in machine learning (Ising model and machine learning)	18. Nov
Benjamin Brauneis	Solving the Schrödinger equation with deep learning	25. Nov
Freyja Walberg	Quantum machine learning	25. Nov
Philipp Spilger	Neural Quantum States	02. Dez
Niels Bracher	Physics-guided Neural Network (PGNN)	02. Dez
Peter Lippmann	Hamiltonian Neural Networks	09. Dez
Jonathan Wider	Learning Hyperparameters for Neural Network Models using Hamiltonian Dynamics	09. Dez
Markus Kreft	Deep Fluids: A Generative Network for Parameterized Fluid Simulations	16. Dez
Carsten Scholz	Identifying topological order through unsupervised machine learning	18. Jan
Cristobal Morbiducci	Learning Hyperparameters for Neural Network Models using Hamiltonian Dynamics	18. Jan