



THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Machine Learning and Statistics Seminar

Room 1 ,Ziskind Building
on Wednesday, Apr 11, 2018
at 11:15

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Neural Relational Inference for Interacting Systems

Abstract:

Interacting systems are prevalent in nature, from dynamical systems in physics to complex societal dynamics. In this talk I will introduce our neural relational inference model: an unsupervised model that learns to infer interactions while simultaneously learning the dynamics purely from observational data. Our model takes the form of a variational auto-encoder, in which the latent code represents the underlying interaction graph and the reconstruction is based on graph neural networks.