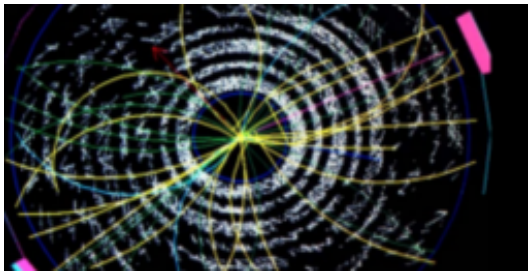

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AstroEncoder: Applications of Deep Learning to Cosmological Data

Monday, 5 June 2017 14:00 (15 minutes)

Current and future cosmology surveys will provide data sets unprecedented in size and precision with which to measure dark energy, dark matter and the early universe through probes like strong gravitational lensing, supernovae, and the cosmic microwave background. First, we'll discuss the challenges posed by astronomically big and complex data, and the potential for machine learning. Then, I will present a variety of successful applications of deep learning techniques to astrophysical and cosmological data, including classification, measurement, and simulation.

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Session Classification: Dark Matter and Astrophysics