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Searching for New Physics with Autoencoders (20'+5')

Friday 16 November 2018 14:00 (25 minutes)

Autoencoders as tools for new physics discovery. The key idea of the autoencoder is that it learns to map background events back to themselves, but fails to reconstruct anomalous events that it has never encountered before. The reconstruction error can then be used as an anomaly threshold. An illustrative example of background QCD jets versus tops will be discussed.

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