



Contribution ID: 26

Type: **not specified**

Adversarial Tuning of Perturbative Parameters in Non-Differentiable Physics Simulators

Tuesday 10 April 2018 11:00 (20 minutes)

In this contribution, we present a method for tuning perturbative parameters in Monte Carlo simulation using a classifier loss in high dimensions. We use an LSTM trained on the radiation pattern inside jets to learn the parameters of the final state shower in the Pythia Monte Carlo generator. This represents a step forward compared to unidimensional distributional template-matching methods.

Intended contribution length

20 minutes

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Session Classification: Session 3