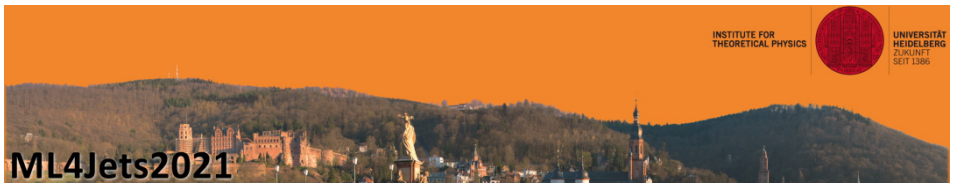

Contribution ID: **12** Type: **not specified**

Measuring QCD Splittings with Invertible Networks

Tuesday, July 6, 2021 5:00 PM (20 minutes)

QCD splittings are among the most fundamental theory concepts at the LHC. In this talk, I will show how they can be studied systematically with the help of invertible neural networks. These networks work with sub-jet information to extract fundamental parameters from jet samples. Our approach expands the LEP measurements of QCD Casimirs to a systematic test of QCD properties based on low-level jet observables. Starting with a toy example, I will present the effect of the full shower, hadronization, and detector effects.

Academic Rank

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