Energy Correlators as a probe of the hard process in Run 24 $p-p$ collisions at $\sqrt{s} = 200\ GeV$ with the sPHENIX detector at RHIC

by

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Abstract

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This dissertation consists of four chapters...

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As discused in chapter 1, there are a variety of jet finding algorithims that prioritize different theoretical aspacts of the underlying physics while being experimentally realizable [1] [2].

In general, a jet identification algorithim needs to be IRC safe. That is, the jet object needs to display invariance in the Infrared (IR) and Collinear regimes, managing real-virtual cancellation and keeping results meaningful for emmission and splitting respectively.

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