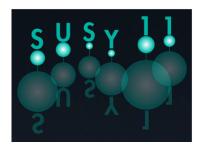
Supersymmetry 2011 (SUSY11)



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Jet Dipolarity: Top Tagging with Color Flow

Monday, 29 August 2011 14:30 (20 minutes)

A new jet observable, dipolarity, is introduced that can distinguish whether a pair of subjets arises from a color singlet source. This observable is incorporated into the HEPTopTagger and is shown to improve discrimination between top jets and QCD jets for moderate to high pT.

Summary

I will discuss how color flow observables can be used to improve background rejection in top tagging algorithms. I will also touch on how color flow observables could be used for event discrimination in other contexts, for example a heavy higgs decaying to WW.

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