

# Top Jets and Substructure at LHC

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Study of high-pt jets from QCD and from highly-boosted massive particles such as tops, W, Z and Higgs, and argue that infrared-safe observables can help reduce QCD backgrounds. Jets from QCD are characterized by different patterns of energy flow compared to the products of highly-boosted heavy particle decays, and we employ a variety of jet shapes, observables restricted to energy flow within a jet, to explore this difference. Results from Monte Carlo generators and arguments based on perturbation theory support the discriminating power of the shapes we refer to as planar flow and angularities. We emphasize that for massive jets, these and other observables can be analyzed perturbatively.

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