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Energy Correlators, Heavy Flavor, and Precision QCD

Jet substructure has been successful in broadening our understanding of fundamental physics and QCD. In this talk, I will introduce a variety of new energy correlator based observables, specifically the two and three point heavy energy correlators, which measure correlations of energy flow at collider experiments on heavy quarks. These observables provide new insights into jet substructure, specifically allowing for direct access to hadronization and intrinsic mass effects before confinement. This opens the door to a new class of precision, heavy flavored based measurements at the LHC and beyond.

Primary author: CRAFT, Evan (Yale University)

Co-authors: MECAJ, Bianka (Yale University); MOULT, Ian (Yale University); LEE, Kyle (MIT); GONZALEZ, Mark (Yale University)

Presenter: CRAFT, Evan (Yale University)