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Dynamical grooming

Dynamically grooming a jet (1) amounts to isolate the hardest splitting in the branching story. The properties of the branching tagged by dynamical grooming can be computed using resummation techniques. In this talk, based on (2), I'll present the resummation structure of dynamically groomed observables, some of them infrared and collinear safe and others Sudakov safe only, up to next-to next-to-double logarithm accuracy including a matching to leading order in α_s . After including non-perturbative corrections, determined through Monte-Carlo, this theoretical calculation provides a very good description of the preliminary ALICE data (3,4).

(1): arXiv/hep-ph/1911.00375
(2): arXiv/hep-ph/2103.06566
(3): arXiv/nucl-ex/2009.07172
(4): arXiv/nucl-ex//2009.12247

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