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Jet SIFT-ing

Friday 4 November 2022 12:30 (20 minutes)

We describe a new scale-invariant jet clustering algorithm which does not impose a fixed cone size on the event. The proposed construction unifies fat-jet finding, substructure axis-finding, and recursive filtering of soft wide-angle radiation into a single procedure. The sequential clustering measure history facilitates high-performance substructure tagging with a boosted decision tree. Excellent object discrimination is maintained for highly-boosted partonic systems, while asymptotically recovering favorable behaviors of both the standard KT anti-KT algorithms.

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