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## Tagging top quarks in variable-sized jets in the CMS experiment

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Identifying boosted hadronic top quarks is a major challenge in the CMS physics program, both in Standard Model measurements and searches for new phenomena. Many excellent tools are available to identify wideangle jets with top quark flavor. However, the intermediate regime between resolved and highly boosted jets is poorly covered. In recent years, CMS has introduced HOTVR, a variable distance parameter jet clustering algorithm that can be used for top quark production at intermediate boosts. So far top identification on HOTVR was done in a cut-based approach with jet substructure variables. In this poster, the development and performance of a BDT for top quark tagging on HOTVR jets is showcased on data and simulation from the data-taking periods 2016-2018 and 2022 with the CMS experiment.

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