

# Study of jet substructure correlations in pp and Pb-Pb collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV with ALICE.

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The internal structure of jets is modified in the quark-gluon plasma due to parton-medium interactions. This has been studied extensively in recent years by various experiments. Current measurements can be described by a variety of models that implement different physics mechanisms, such as medium-induced radiation, medium response and color coherence

In this new study, we explore correlations of jet substructure observables and their potential to distinguish various phenomena modifying the parton shower.

We focus on correlations of jet substructure observables with varying sensitivity to the angular and momentum structure of the jet.

A study of the correlation of the jet mass and jet girth is presented utilizing pp and Pb-Pb collision data from ALICE at  $\sqrt{s_{\text{NN}}} = 5.02$  TeV.

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