

Abstract Submitted
for the DNP20 Meeting of
The American Physical Society

Measurements of jet substructure in Pb-Pb and pp collisions at 5.02 TeV with ALICE¹ LAURA HAVENER, Yale University, ALICE COLLABORATION — Jets are excellent probes of the QGP produced in heavy-ion (HI) collisions because the partons inside jets interact with the medium, leading to jet energy loss and substructure modification - a phenomenon called jet quenching. Recent measurements of groomed jet substructure in PbPb and pp collisions at $\sqrt{s_{NN}} = 5.02$ TeV using the ALICE detector will be shown. Specifically, Soft Drop (SD) grooming techniques are used to remove the soft radiation products inside a jet to access the jets hard emissions. Groomed substructure variables could be sensitive to medium-induced signals such as coherence, multiple soft-radiation, and single hard emissions. They are also directly calculable in pQCD. Previous measurements of jet splittings show evidence of these effects but have not been unfolded due to the large contribution of background splittings in the response. These new results benefit from an improved background subtraction technique and are measured in a phase space that suppresses background splittings by using semi-central (30-50

¹DOE grant DE-SC004168

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Date submitted: 26 Jun 2020

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