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Comparison of jet mass in pp and Pb+Pb collisions using ATLAS at $\sqrt{s_{NN}}$=5.02 TeV

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The mass of inclusive jets in lead-lead and proton-proton collisions at $\sqrt{s_{\mathrm{NN}}} = 5.02$ TeV is reported using the ATLAS Run 2 data at the LHC. Jet substructure observables are of interest to access the internal structure of jets produced in proton-proton collisions. These observables are sensitive to the angular and momentum correlations of the jet fragments, and are thus useful in characterizing the modification of jets in heavy ion collisions providing complementary information to single particle fragmentation functions. In this analysis, the mass of anti-k_{t} R = 0.4 jets is measured as a function of centrality and jet transverse momentum in Pb+Pb collisions and compared to measurements at the same collision energy in proton-proton collisions. The current status of this measurement is presented and discussed in the context of other jet measurements in Pb+Pb collisions.

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