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Study of jet energy loss with jet-hadron correlations in pp and Pb–Pb collisions at $\sqrt{s_{\rm NN}} = 2.76$ TeV with ALICE[1] RAYMOND EHLERS, Yale Univ, ALICE COLLABORATION — High momentum jets produced in ultra-relativistic heavy ion collisions are sensitive probes of the properties of the quark-gluon plasma. Measurement of jet energy loss in jet-hadron correlations, in which a reconstructed jet is correlated with charged hadrons in the event, is a direct probe of interactions between the jet and the medium. The near-side of the correlation is sensitive to the modification of jet structure, while the away-side is sensitive to broadening and softening of the associated recoil jet due to jet quenching. Azimuthal jet-hadron correlations were measured for R=0.2 full (charged + neutral) jets reconstructed in Pb–Pb collisions at $\sqrt{s_{\rm NN}} = 2.76$ TeV recorded by the ALICE collaboration at the LHC. To remove contributions from the Pb–Pb combinatorial background, jet constituents were required to pass a high energy (for EMCal clusters) and momentum (for charged tracks) threshold. Associated charged hadron yields and correlation widths were extracted from the correlation function for several associated hadron transverse momenta. In order to provide a baseline measurement, jet-hadron correlations were also measured in pp data embedded into Pb–Pb data. Model predictions are compared. The current status of the analysis will be presented.

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Raymond Ehlers
Yale Univ

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