

Abstract Submitted
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Measuring Jet-like Hadron- $\phi(1020)$ Correlations in p-Pb Collisions with ALICE at the LHC JUSTIN BLAIR, University of Texas System, ALICE COLLABORATION¹ — The ALICE experiment at the Large Hadron Collider (LHC) is designed to study relativistic heavy ion collisions. Studying hadronic resonance particles (such as the K^* , $\phi(1020)$, $\Lambda(1520)$) can give us information about the hadronic phase of the collisions. Since resonance particles decay and undergo scattering and regeneration, comparing resonance production across different multiplicities and collision system sizes allows us to probe properties of the hadronic medium. In addition, studying two-particle jet-like angular correlations allows us to separate particles produced in hard-processes (jets) from those produced from soft processes (bulk). Resonances produced with respect to jets can be further differentiated into a near-side peak (with little medium interaction) and an away-side peak (with a longer path-length through the medium). In this way, performing two-particle jet-like angular correlations with identified resonances allows us to study the interaction of resonances with the initial collision medium, as well as any differences in production mechanisms across different collision systems. I will present in this talk the current progress of 2D jet-like hadron- $\phi(1020)$ angular correlations in p-Pb collisions as a function of multiplicity.

¹Work done with the ALICE collaboration at the LHC

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