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Isolated Photon-Hadron Correlations in pp and p-Pb Collisions at $\sqrt{s_{\text{NN}}} = 5.02$ TeV Measured with the ALICE Detector FERNANDO TORALES ACOSTA, University of California, Berkeley — The measurement of isolated photon-tagged correlations of jets and jet fragments is a promising channel for the study of partonic energy loss in heavy-ion collisions. Photons are measured in the ALICE EMCal. We use a combination electromagnetic shower-shape information and isolation criteria obtained with the ALICE ITS to reduce the large background from meson decays and fragmentation photons. We present isolated photon-hadron correlations and yields of charged hadrons in $\sqrt{s_{\text{NN}}} = 5.02$ TeV pp and pPb collisions in an unexplored kinematic range: [12-40] GeV/ c for the photon p_{T} and [0.7-10] GeV/ c for the charged track p_{T} . We report the first measurement of photon-tagged parton fragmentation in p-Pb at the LHC. We show the ratio of fragmentation measurements in pp and p-Pb is consistent with unity, constraining the impact of cold nuclear matter effects on parton fragmentation.

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