

Abstract Submitted
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π^0 **production in p+p and Pb+Pb collisions at the LHC** JOCELYN MLYNARZ, Wayne State University, ALICE COLLABORATION — We report results of the π^0 reconstruction in p+p and Pb+Pb at $\sqrt{(S_{NN})} = 2.76$ TeV collisions at the LHC, using invariant mass and shower shape analysis based on signals from the ALICE EMCal and PHOS electromagnetic calorimeters, and e^+e^- conversion pair reconstruction with the central tracking system. We present measurements of the π^0 production cross section as a function of transverse momentum and the neutral pion elliptic flow compared with the v_2 of charged pions. We use the measured spectra to determine the nuclear modification factor, R_{AA} , of Pb+Pb collisions which we compare to theoretical predictions, results from RHIC as well as from the charged pion analysis, showing a strong suppression of the π^0 spectrum at high- p_T .

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