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Measurement of the azimuthal anisotropy of charged-particle production in Xe+Xe collisions at 5.44 TeV with the ATLAS detector[1]
PENGQI YIN, Columbia University, ATLAS COLLABORATION COLLABORATION — This talk describes the measurements of flow harmonics v_2–v_6 in Xe+Xe collisions at 5.44 TeV performed using the ATLAS detector at the LHC. Measurements of the centrality, multiplicity and p_T dependence of the v_n obtained using two-particle correlations and the scalar product technique will be presented. The measurements are also performed using a template-fit procedure, which was developed to remove non-flow correlations in small collision systems. This non-flow removal is shown to have a significant influence on the measured v_n at high p_T, especially in peripheral events. Comparisons of the measured v_n with measurements in Pb+Pb collisions and p+Pb collisions at 5.02 TeV are also presented. The v_n values in Xe+Xe collisions are observed to be larger than those in Pb+Pb collisions for $n = 2$, 3 and 4 in the most central events. However, with decreasing centrality or increasing harmonic order n, the v_n values in Xe+Xe collisions become smaller than those in Pb+Pb collisions. The v_n in Xe+Xe and Pb+Pb collisions are also compared as a function of the mean number of participating nucleons and the measured charged-particle multiplicity in the detector. Comparisons of the v_n measurements with theoretical calculations will also be shown.

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