Estimates of the non-flow contribution in Pb-Pb flow analysis using two-particle correlations in pp with the ALICE detector at the LHC

VERA LOGGINS, Wayne State University — Two-particle azimuthal correlations are statistically the most precise method for measuring anisotropic flow in heavy-ion collisions. The main drawback of this method is its strong sensitivity to non-flow correlations which, unlike real flow, do not have a geometrical origin. Non-flow contributions can be estimated from two-particle azimuthal correlations using pp data. We report measurements using the \( < u^*Q > \) method applied to pp collisions at \( \sqrt{s} = 2.76 \) TeV and \( \sqrt{s} = 7 \) TeV. We study the dependence of correlations on two-particle separation in pseudorapidity in order to find the separation which minimizes the correction without sacrificing the statistics too much. Measurements are performed for first to fifth harmonics.