Abstract Submitted
for the DNP11 Meeting of
The American Physical Society

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.

Vera Loggins
Wayne State University

Date submitted: 21 Jun 2011 Electronic form version 1.4