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# Hadron Correlations in ATLAS

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Hadron correlations are important tools used to study the properties of the medium produced in relativistic heavy ion collisions. We present detailed measurements of flow harmonics $v_2$-$v_6$ via di-hadron correlations in broad $p_T$, $\Delta\eta$ and centrality ranges using the 2010 Pb+Pb data from ATLAS. These measurements are compared to the corresponding values obtained via event-plane measurements. This result provides new insights on the origin of the long range "ridge" structure over broad $pT$ ranges. Measurements of the dipolar flow ($v_1$) associated with initial dipole asymmetry as function of $p_T$ and centrality are also presented. Finally, the results of correlations between harmonic planes of different orders measured via two-plane and three-plane correlations are also discussed.

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