

Three-Particle Jet-Like Correlations in Pb-Pb Collisions at $\sqrt{s_{\{NN\}}}=2.76$ TeV at ALICE

Two-particle correlations at RHIC and SPS in heavy-ion collisions have shown away-side structures that could be explained by conical emission, either from Mach-cone shock waves or Cerenkov gluon radiation, or other physics mechanisms such as path-length dependent energy loss or deflection by radial flow. Three-particle correlations at RHIC showed evidence of conical emission. More recently, triangular flow has been suggested to be present in heavy-ion collisions; it was assumed to be zero in the RHIC and SPS analyses. Triangular flow has also been suggested as a possible source of the structure seen in the correlations at RHIC and SPS. We study 3-particle correlations at ALICE to look for the presence of conical emission at LHC energies. Backgrounds in this study will include the contributions from the 2nd, 3rd and 4th harmonics of flow. This poster will show the analysis and the results obtained from 2.76 TeV Pb-Pb collision data by the ALICE experiment at the LHC.

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