## Two- and Three-Particle Jet-Like Correlations in the ALICE Experiment at the LHC

## Abstract content

The Large Hadron Collider (LHC) will be capable of colliding protons at energies of up to  $\sqrt{s} = 14$  TeV and lead ions at energies of up to  $\sqrt{s_{NN}} = 5.5$  TeV. In central Pb+Pb collisions, it is expected that the Quark Gluon Plasma (QGP), a hot a dense medium of deconfined quarks and gluons, will be formed. One way to study what happens in these collisions is through jet-like correlations. In heavy-ion collisions, these correlations can be used to study the interactions between the medium and jet. At prior experiments at lower collisions energies, many interesting effects were seen in these correlations in heavy-ion collisions, such as jet-suppression, energy loss, a near-side ridge correlated with the trigger particle, conical emission on the away-side. The correlations from {\it pp} collisions can be used to give a baseline for the heavy-ion collisions. We will present results of 2- and 3-particle correlations in {\it pp} collisions at  $\sqrt{s} = 900$  GeV and 7 TeV collisions from the ALICE experiment at the LHC. These results will be compared to prior results from lower energies, from both {\it pp} collisions and also to simulation.

## Summary

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