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Measurements of charge-dependent correlations in Xe-Xe collisions with ALICE

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The main goal of heavy-ion collisions is to study the deconfined phase predicted by quantum chromodynamics, the Quark Gluon Plasma. In the presence of the QGP, theories predict the existence of field configurations that could violate parity symmetry locally at a level that could be experimentally measured. In heavy-ion collisions, local parity violation manifests as charge separation along the direction of the strong magnetic field, a phenomenon called the Chiral Magnetic Effect (CME). We present results on the centrality, particle separation in pseudorapidity, and transverse momentum dependence of the charge-dependent two- and three-particle correlators in Xe-Xe collisions at $\sqrt{s_{\rm NN}}=5.44$ TeV recorded by the ALICE detector. For the charge dependence of the three-particle correlator, often employed as evidence for the CME, we find similar values to those measured in Pb-Pb collisions and we discuss the implications of this observation.

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