

# The Chiral Magnetic Effect in isobaric nuclei at LHC energies

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Global P and CP invariances seem to be preserved in the strong interaction. However, it is possible to violate locally P and CP invariances due to the chiral anomaly in Quantum ChromoDynamics (QCD), which creates an imbalance in chirality. Heavy ion collisions provide an environment in which this local P and CP violation is expected to create a measurable effect. Under the presence of the strongest magnetic field in nature that we are aware of created in heavy ion collisions, this chirality imbalance will result in a current in the direction of the magnetic field, called the Chiral Magnetic Effect (CME). So far, no conclusive evidence for the CME has been found in experiments due to large background contaminations in the experimental observables. In this talk, I will show how this effect is currently measured and which techniques are used in an effort to disentangle the CME signal from the large backgrounds. Furthermore, I will discuss the potential use of collisions of isobaric nuclei at LHC energies to investigate the CME.

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