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**<https://us02web.zoom.us/j/84420351046>**

Chiral vortical effect

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Abstract: Chiral effects are new transport phenomena in systems of massless fermions which are argued to be macroscopic manifestations of the axial anomaly. The anomaly is quantum in its nature and so are the chiral effects being similar in this sense to superfluidity and superconductivity. They attracted significant attention in the literature appearing in a variety of systems from Dirac semimetals to quark-gluon plasma. Among these phenomena there is a class of effects caused by the medium rotation -- chiral vortical effects (CVE), which are related to the spin polarization. In this overview talk I will discuss the relation of the CVEs to the anomalies and tell about new examples of vortical responses in chiral media.

Baseado em:

<https://arstechnica.com/science/2017/08/taking-quark-gluon-plasma-for-a-spin-may-un-break-a-fundamental-symmetry/>