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CANCELLED: The anomalous transport of axial charge in QGP, induced by topological fluctuations.

Axial charge imbalance is an essential ingredient in novel effects related to the chiral anomaly like the chiral magnetic effect. In non-Abelian plasma with chiral fermions, local axial charge can be generated either by topological fluctuations of the medium or by usual thermal fluctuations. We show how local topological domains in the Quark Gluon Plasma lead to the dynamical generation of an axial flavor current. The current is explicitly calculated in the context of holography and its phenomenological importance in Heavy-Ion collisions is discussed. The transport of dynamically generated axial charge density is then presented, and the corresponding chiral magnetic current is computed.

Summary

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