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## New Results from SPS and RHIC

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Parity-odd domains, corresponding to non-trivial topological solutions of the QCD vacuum, might be created during relativistic heavy ion collisions. These domains are predicted to lead to charge separation of quarks along the system's orbital momentum axis. We investigate a three particle azimuthal correlator which is a P even observable, but directly sensitive to the charge separation effect. We report measurements of charged hadrons near center-of-mass rapidity with this observable in Au+Au and Cu+Cu collisions at  $\sqrt{s_{NN}}=200$  GeV/c using the STAR detector. The results are presented as a function of collision centrality, particle separation in rapidity, and particle transverse momentum. Consistency cross checks for different data sets, detectors and kinematic regions are performed. A signal consistent with several expectations from the theory is detected. We compare our results to the predictions of existing event generators, and discuss possible contributions from other effects that are not related to parity violation. New ideas, future experimental and analysis plans are discussed.

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