

Critical spin fluctuation near CEP

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We discuss the impact of phase transitions on quark spin fluctuation and correlation. We propose that quark-antiquark correlation which related to vector meson spin alignment and Hyperon spin correlation can serve as a signature of CEP. Using the (p)NJL model, we qualitatively study the properties of quark-antiquark spin correlation. Our findings reveal a peak structure near the CEP, which could serve as an experimental signature of the CEP and explain the non-monotonic behavior of meson alignment at low collision energies.

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