

## Measurements of hyperon spin correlation in Au+Au collisions at BES-II energies at STAR

The observation of hyperon global polarization and vector meson spin alignment in heavy-ion collisions has revealed that spin phenomena are important probes of quark matter properties. These findings point toward possible spin correlations between quarks and antiquarks in the quark-gluon plasma. Such correlations are sensitive to production mechanism and evolution dynamics of spin polarization, as well as the interplay between spin and the other dynamical degrees of freedom in the collision system. In this talk, we report the status of spin correlation measurements of Lambda-(anti)-Lambda hyperon pairs in Au+Au collisions at BES-II energies (7.7-27 GeV) at RHIC-STAR. The results provide insights into the spin polarization mechanism in heavy-ion collisions, and shed light on fundamental properties of strong interactions and color confinement.

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