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Global hyperon polarization in Au+Au collisions at √sNN = 27 GeV in STAR experiment

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The Quark-Gluon Plasma (QGP), appearing in non-central nuclear-nuclear collisions is generated with large orbital angular momentum. Spin-orbit coupling alignes spin directions of produced particles with system angular momentum, known as vorticity. Properties of hyperon weak decays lead to the way of measuring polarization, that reflects vorticity. The global polarization of Λ and $\overline{\Lambda}$ hyperons was measured for Au+Au collisions at $\sqrt{s_{NN}}$ = 7.7 - 200 GeV recorded with the STAR at the RHIC. However, it is also important to measure the global polarization of different particle species. In this talk we will report new results of hyperon global polarization ($P_{\Lambda+\overline{\Lambda}}$ and $P_{\Xi^-+\overline{\Xi}^+}$) measurement via different methods for high-statistics Au+Au collisions at $\sqrt{s_{NN}}$ = 27 GeV.

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