Global hyperon polarization in Au+Au collisions at $\sqrt{s_{NN}} = 27$ GeV in the STAR experiment

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STAR collaboration measured a global polarization of Λ hyperons in Au+Au collisions at $\sqrt{s_{NN}}$ = 7.7 - 200 GeV. Global hyperon polarization, appearing in non-central nucleus-nucleus collisions due to spin-orbit coupling, reflects initial angular momentum and vorticity of the system. While different theoretical approaches are able to successfully describe global hyperon polarization energy dependence, it is still important to obtain new experimental input for understanding of global polarization nature, especially in the multistrange hyperon sector. In this talk, we will report results of Ξ hyperon global polarization ($P_{\Xi^-+\overline{\Xi}^+}$) measurement via different methods for high-statistics Au+Au collisions at $\sqrt{s_{NN}} = 27$ GeV.