

XXV International Baldin Seminar on High Energy Physics Problems
"Relativistic Nuclear Physics and Quantum Chromodynamics"



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Elliptic and triangular flow for identified hadrons in Au+Au collisions at $\sqrt{s_{NN}} = 14.5, 27, 62.4$ GeV from EPOS4

Heavy-ion collisions create matter which is characterized by high temperature and energy density, called Quark-Gluon Plasma (QGP). The measurement of azimuthal anisotropy of particles is one of the methods for studying the transport properties and equation of state of the created matter. The azimuthal analysis is carried out using the Fourier expansion of the single-particle distribution of particles over the azimuthal angle. The second (v_2) and third (v_3) order Fourier coefficients is called elliptic and triangular flow respectively and differently sensitive to the initial state of colliding nuclei.

This work is devoted to the study of elliptic and triangular flow in Au+Au collisions from EPOS4 generator for $\sqrt{s_{NN}} = 14.5, 27$ and 62.4 GeV. Flow analysis was performed as a function of transverse momentum and centrality. Physics implications will be discussed.

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