

Two-Pion Femtoscopic Correlations in Au+Au Collisions at $\sqrt{s_{NN}} = 3$ GeV from STAR

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The technique of correlation femtoscopy helps one not only to estimate the geometric dimensions and lifetime of the particle emission region in nucleus-nucleus collisions, but also help to answer the question of whether the source has a boost-invariant spatiotemporal structure. This work is aimed to studying the femtoscopic parameters of identical-pion emission region in Au+Au collisions at $\sqrt{s_{NN}} = 3$ GeV in the STAR experiment. The extracted radii (R_{out} , R_{side} , R_{long} , $R_{out-long}^2$) and correlation strength (λ) are presented as a function of collision centrality, pair rapidity and transverse momentum. The obtained femtoscopic parameters are compared with the model predictions.