

WPCF 2023 - XVI Workshop on Particle Correlations and Femtoscopy & IV Resonance Workshop 2023



Contribution ID: 58

Type: **Invited**

Non-identical femtoscopy in Au+Au collisions at $\sqrt{s_{NN}} = 3$ GeV in STAR

Friday, 10 November 2023 09:00 (25 minutes)

Femtoscopy studies involving two-particle correlations arising from quantum statistics (Fermi-Dirac or Bose-Einstein) and Final State Interactions (Coulomb, strong) provides understanding of the space-time properties of the matter and final state interactions of particles formed in a relativistic collision. While source function can be used to determine the geometry and dynamic properties, two particle wave function can be used to determine the interactions.

With the recent fixed-target Beam Energy Scan II program, STAR extends the collision energy range to $\sqrt{s_{NN}} = 3$ GeV towards higher baryon chemical potential regions ($\mu_B = 720$ MeV). We will present the latest results of kaon-proton femtoscopy measurement in Au+Au collisions at $\sqrt{s_{NN}} = 3$ GeV from the STAR experiment.

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Session Classification: Day 5 - Morning