

1 Bose-Einstein correlations of charged kaons produced by  $\sqrt{s_{NN}} = 200$   
2 GeV Au+Au collisions in STAR at RHIC

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5 **Abstract**

6 Bulk properties of nuclear matter can be extracted by employing femtoscopic methods to study the high-  
7 energy systems emerging from relativistic heavy-ion collisions. The space-time structure of the particle-emitting  
8 source can be examined by observing the effects of quantum-statistics and final-state-interactions on the pair  
9 correlations of particles, with data collected by the STAR experiment from  $\sqrt{s_{NN}} = 200$  GeV Au+Au collisions  
10 created at RHIC. On account of being less susceptible to resonance decays and having a smaller reaction-cross-  
11 section while interacting with hadrons, kaons provide a complementary probe of the particle-emitter as compared  
12 to pion analyses. Results from Bose-Einstein correlations between pairs of charged kaons will be presented in  
13 this study and compared to descriptions based on a Levy-shaped source distribution.