

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

D. Kincses<sup>1</sup>, for the STAR Collaboration

<sup>1</sup> *Department of Atomic Physics, Eötvös Loránd University, H-1117 Budapest, Hungary*

*Contact e-mail: kincses@ttk.elte.hu*

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

*Note that this abstract is exactly the same as the one approved for Quark Matter 2022, presented as a poster by Ayon Mukherjee from our group.*