

# Correlations of non-identical particles in A+Au collisions at $\sqrt{(S_{NN})} = 130$ GeV

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## Abstract

Correlations of non-identical particles provide unique information about space-time extent of the heavy-ion reactions. Information about the geometrical and temporal structure of the source is encoded via final state interactions in the correlation function. It was also suggested<sup>1</sup> that such correlations may provide unique information about sequence of freeze-out. We will present results of the first analysis of unlike meson ( $\pi^+\pi^-$ ,  $K^+K^-$ ) correlations made by the STAR<sup>2</sup> Collaboration at RHIC in Au+Au collisions at  $\sqrt{(S_{NN})} = 130$  GeV.

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<sup>1</sup> R. Lednicky,, V.L. Lyuboshits, B. Erazmus, D. Nouais Phys. Lett. B373 (1996)

<sup>2</sup> K.H. Ackermann et al, STAR Collaboration, nucl-ex/0009011, 2000.