

Abstract for an Invited Paper
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**Identified particle transverse momentum distributions upto 12 GeV/c from Au+Au collisions at $\sqrt{s_{NN}} = 200$
GeV¹**
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Ultra-relativistic Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV at RHIC create a hot and dense medium that exhibits novel properties. Study of these properties and hadronization mechanisms of the medium requires identified particle results over wide transverse momentum (p_T) range since different mechanisms govern hadron production in different kinematic regions. Particle identification at low, intermediate and high p_T is achieved from Time Projection Chamber and Time-of-Flight system at STAR. In this talk, we present the p_T distributions of π^\pm , p and \bar{p} , their nuclear modification factors and particle ratios from 200 GeV Au+Au collisions up to 12 GeV/c at mid-rapidity. We discuss the relative baryon enhancement at intermediate p_T and the flavor dependence of the energy loss. We also discuss the possible transition between jet dominant fragmentation and quark coalescence at hadronization.

¹On behalf of the STAR Collaboration.