

Abstract Submitted
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Identified charged hadron spectra in Au+Au and Cu+Cu collisions in PHENIX¹ MASAYA OKA, University of Tsukuba, PHENIX COLLABORATION — One of the most significant observations at the RHIC is that unlike mesons, baryons are not suppressed at intermediate p_T (2 - 5 GeV/ c) region. This has prompted the development of a new theoretical framework, quark recombination, however, the agreement between recombination models and data is still qualitative. The systematic measurement of identified hadron spectra up to large p_T region is crucial for the further understanding of hadron production at RHIC energies. The PHENIX experiment has measured the π^\pm , K^\pm , p , and \bar{p} production in Au+Au collisions at $\sqrt{s_{NN}} = 62.4$ and 200 GeV and in Cu+Cu collisions at $\sqrt{s_{NN}} = 22.5$, 62.4 and 200 GeV. These data will be used to study the system size and collision energy dependence of hadron production. In this session, we will present new results on identified charged hadron spectra at large p_T region in $\sqrt{s_{NN}} = 62.4$ and 200 GeV Au+Au, measured by the Time-of-Flight detector and Aerogel Cherenkov Counter in PHENIX. The latest studies on Cu+Cu collisions in different energies will also be presented.

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