



Contribution ID: 80

Type: **Contributed Talk**

Measurement of pion, kaon, and proton spectra with Heavy Flavor Tracker in Au+Au 200GeV at STAR experiment

Tuesday 28 June 2016 16:20 (20 minutes)

The transverse momentum (p_T) spectra have been studied with different collision systems and in a wide range of collision energies.

They have provided much information such as kinetic and chemical freeze-out temperatures of the medium created by the heavy ion collisions by comparing to the hydrodynamical and statistical thermal models, respectively.

In order to get intrinsic properties, it is important to measure primary tracks, which are not coming from decay processes.

The Heavy Flavor Tracker (HFT) was installed at the STAR detector, and we have measured primary protons with weak decays removed experimentally at RHIC for the first time.

We will show the preliminary results of pion, kaon, and proton p_T spectra with the HFT in Au+Au 200GeV, and a comparison of observables such as chemical freeze-out temperature obtained from thermal model calculations.

On behalf of collaboration:

STAR

Primary author: MIZUNO, Sanshiro (Lawrence Berkeley National Laboratory)

Presenter: MIZUNO, Sanshiro (Lawrence Berkeley National Laboratory)

Session Classification: QCD Phase Diagram