

Nuclear modification factor for identified hadrons at forward rapidity in $Au + Au$ reactions at $\sqrt{s_{NN}} = 200$ GeV

Radoslaw Karabowicz, for the **BRAHMS** Collaboration
M. Smoluchowski Institute of Physics, Jagiellonian University

The observed suppression of hadrons at high p_T in $Au + Au$ collisions relative to production in $p + p$ may be due to several in-medium effects (e.g. jet-quenching, quark recombination). Studying the effect for identified hadrons shows that suppression exists for pions, but vanishes for protons.

BRAHMS has collected a large sample of data from $Au + Au$ and $p + p$ collisions at $\sqrt{s_{NN}} = 200$ GeV at forward rapidities utilizing its unique setup to cover p_T range up to 4 GeV/c. Spectra in p_T at forward rapidities ($y \approx 3.2$) for pions, kaons, protons and their antiparticles shall be presented in this talk. Nuclear modification factor (R_{AuAu}) will also be shown as a function of rapidity and centrality. Discussion of the results will be made, together with preliminary results from $Cu + Cu$ collisions at $\sqrt{s_{NN}} = 200$ GeV.