## Abstract Submitted for the APR13 Meeting of The American Physical Society

Identified charged hadron spectra and ratios in Au+Au and d+Au collisions at  $\sqrt{s_{NN}}=200$  GeV RON BELMONT, University of Michigan, PHENIX COLLABORATION — Identified hadrons are an important probe of the hot and dense nuclear medium created at RHIC. At low  $p_T$  the particle yields are dominated by soft production and exhibit collective flow properties. At high  $p_T$  the particle production is dominated by fragmentation and the yields exhibit suppression relative to the yield in p+p collisions scaled by the number of binary nucleon-nucleon collisions. In the intermediate  $p_T$  region, 2–6 GeV/c, there is an interplay between these effects and, in addition, different models of hadronization, such as parton recombination, may be needed to explain the data. While mesons, like pions and kaons, exhibit a suppression pattern of their yields in the intermediate  $p_T$  region, baryons, like (anti)protons, exhibit almost no suppression. Furthermore, similar meson vs. baryon dynamics in the intermediate  $p_T$  region are found in d+Au collisions, where no hot nuclear medium effects are present. While mesons exhibit a small Cronin enhancement, baryons exhibit a much stronger Cronin enhancement. In this talk, the transverse momentum  $(p_T)$  spectra and ratios of identified charged hadrons  $\pi^{\pm}$ ,  $K^{\pm}$ , p, and  $\bar{p}$  produced in Au+Au and d+Au collisions at 200 GeV in different centrality bins will be presented.

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