## Abstract Submitted for the APR08 Meeting of The American Physical Society

Decomposition of awayside components of dijet correlation in Au+Au collisions at  $\sqrt{S_{NN}}=200$  GeV at PHENIX CHIN-HAO CHEN, Department of Physics and Astronomy, Stony Brook University, PHENIX COLLABO-RATION — At intermediate transverse momentum, dijet angular correlations show a local minimum at  $\Delta\phi$ , peaking one radian away from  $\pi$ . This structure indicates that the awayside jet is modified by the medium created in heavy ion collisions. We present the measurement of inclusive photon-hadron  $\Delta\eta$  -  $\Delta\phi$  correlations from  $\sqrt{s_{NN}}=200$  GeV Au+Au collisions in PHENIX. In central collisions, an enhancement in per trigger associated hadrons in the near-side (trigger) jet is observed for  $0.5 < \Delta\eta < 0.7$ . The awayside components, as a function of  $\Delta\eta$ , are decomposed using  $\delta\phi$  into a head region, corresponding to the "punch through" jet, and a shoulder region containing the medium response. The awayside components are found to be independent of  $\Delta\eta$ .  $p_T$  weighted yields allow investigation of how the transverse momentum is distributed between near- and away-side associated particles.

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