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Probing the medium response by two-particle correlations in Au+Au Collisions at $\sqrt{S_{NN}} = 200$ GeV by the PHENIX Experiment CHIN-HAO CHEN, Department of Physics and Astronomy, Stony Brook University, PHENIX COLLABORATION — PHENIX has measured the two-particle inclusive photon-hadron $\Delta \eta$ - $\Delta \phi$ correlations at intermediate p_T . We decompose the away-side into a head region corresponding to the jet remnant which punches through the medium, and the shoulder, which contains the medium response. We report the per trigger yield of correlated particles in the two away-side components as well as in the trigger jet and near-side ridge in pseudorapidity. In order to study momentum flow between the jet and the medium, we weight the associated particle yields with transverse momentum, and compare the p_T flow of the different components of the correlation function.

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