Abstract Submitted for the DNP07 Meeting of The American Physical Society

Jet Energy Loss Observables in PHENIX JUSTIN FRANTZ, SUNY Stony Brook, PHENIX EXPERIMENT COLLABORATION — An integral part of the RHIC program has been to use jet probes to study the Heavy Ion Medium. Such measurements have progressed from comparisons of plain particle spectra at high p, to two and three particle opening angle correlations, and currently further jet observables are being explored. Recently for example, PHENIX has found an interesting two-component pt- dependence of the two-particle yields. Extending the 2- particle correlations result by requiring a third hard particle in certain phase space regions, may reveal more detailed information about energy loss and possible resulting geometric biases. Yet another example is moments of the momentum ratio distributions of the jet particles which may also be able to distinguish energy loss models. The status of such analyses in PHENIX and also their relation to Direct Photon-Jet correlations also explored by PHENIX will be discussed.

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Date submitted: 02 Jul 2007

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