

Abstract Submitted
for the DNP07 Meeting of
The American Physical Society

Azimuthal anisotropy of charged hadrons in Au+Au and Cu+Cu collisions at RHIC MICHAEL ISSAH, Vanderbilt University, PHENIX COLLABORATION — The azimuthal anisotropy in particle emission is an important probe for the early dynamics of heavy-ion collisions. At RHIC, it has been well described by hydrodynamic models for transverse momenta below ~ 2 GeV/c. Recombination models have been invoked to explain the baryon/meson difference and the unexpectedly high strength of the signal at intermediate p_T . At high p_T , the azimuthal asymmetry in the particle spectra can be attributed to jet quenching. The PHENIX Collaboration has recorded high statistics Au+Au and Cu+Cu collisions at center-of-mass energies in the range 62.4-200 GeV. The azimuthal anisotropy of charged hadrons obtained over a broad p_T range will be presented and discussed. In particular, results from a cumulant analysis will be compared to the standard reaction plane method of flow analysis.

Michael Issah
Vanderbilt University

Date submitted: 02 Jul 2007

Electronic form version 1.4