Abstract Submitted
for the APR11 Meeting of
The American Physical Society

The Power Spectrum and Viscosity in Heavy Ion Collisions
AGNES MOCSY, Pratt Institute — In this talk we discuss the analogy between data from heavy-ion collisions and the Cosmic Microwave Background. We identify p_T correlations data as the heavy-ion analogy to the CMB and extract a power-spectrum from the heavy-ion data. We define the ratio of the final state power-spectrum to the initial coordinate-space eccentricity as the transfer-function. From the transfer-function we find that higher n terms are suppressed and we argue that the suppression provides information on length scales like the mean-free-path. We make a rough estimate of the mean-free-path and find that it is larger than estimates based on the centrality dependence of v_2.

Agnes Mocsy
Pratt Institute

Date submitted: 14 Jan 2011 Electronic form version 1.4