Abstract Submitted
for the HAW09 Meeting of
The American Physical Society

Effects of Fluctuations and Inhomogeneities on Jet quenching in High Energy Nuclear Collisions[1] ENRIQUE RAMIREZ-HOMS, University of Texas at El Paso, R.J. FRIES, R. RODRIGUEZ, Texas A&M Cyclotron Institute — In a quark-gluon plasma with color degrees of freedom, jets of energetic partons interact and lose energy. They can thus be used to probe its properties. Here we study how fluctuations in the energy density within the plasma affect this process. The goal is to determine the size of the fluctuations required to have an observable effect on the nuclear modification factor and elliptic flow of pions.

[1]Funded by NSF-REU Program.

Enrique Ramirez-Homs
Texas A&M Cyclotron Institute

Date submitted: 03 Aug 2009 Electronic form version 1.4