Abstract Submitted for the APR06 Meeting of The American Physical Society

Nucleon Diffusion Observables in heavy ion reactions MANYEE TSANG, Michigan State University — The study in heavy ion collision in the past years has focused on the understanding of the properties of bulk nuclear matter at densities above and below the saturation density. One promising observable to study the density dependence of the symmetry energy term in the nuclear Equation of State is the isospin diffusion. The idea is that the symmetry term in the nuclear EOS acts as the driving force that "transports" neutron and/or protons between the projectile and target during the multifragmentation process The isospin transport observable constructed with the isoscaling parameters has been used to constraint the equation of state which describes the dynamics of heavy ion reactions. In this talk, we will explore other observables that can be used to construct the isospin transport ratios. This work is supported by the National Science Foundation under Grant Number PHY-01-10253

ManYee Tsang

Date submitted: 13 Jan 2006

Electronic form version 1.4