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The Classical Limit of the Nuclear Symmetry Energy<sup>1</sup> RODOLFO GONZALEZ, JORGE LOPEZ, ENRIQUE RAMIREZ-HOMS, University of Texas at El Paso — This talk will report on the study of the symmetry energy of infinite nuclear matter using classical molecular dynamics. Through simulations of infinite nuclear matter systems at different temperatures, densities and isospin content, fits to the equation of state can be obtained and used to extract the symmetry energy of nuclear matter. Preliminary results indicate that matter with high isospin asymmetry (Z/A=0.3) have extremely low saturation densities and probably cannot exhibit a transition from a liquid to a gaseous phase. The symmetry energy found appears to be independent of the temperature, and it compares satisfactorily to previous calculations.

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