Abstract Submitted for the HAW09 Meeting of The American Physical Society

Predictions in $^{238}\mathrm{U}$ + $^{238}\mathrm{U}$ collisions at RHIC HIROSHI MASUI, Lawrence Berkeley National Laboratory — Planed $^{238}\mathrm{U}$ + $^{238}\mathrm{U}$ collisions at RHIC (2012) would provide opportunities to answer several open questions at RHIC. For example, the ratio of elliptic flow v_2 to the initial spatial anisotropy ε as a function of transverse number density would indicate to the extent which the system approaches the ideal hydrodynamical limit. The saturation of v_2/ε could indicate that the system reaches local thermal equilibrium. Until now, there were no hint of saturation even at most central $^{197}\mathrm{Au}$ + $^{197}\mathrm{Au}$ collisions at top RHIC energy. Due to the larger size and the deformation of Uranium, the $^{238}\mathrm{U}$ + $^{238}\mathrm{U}$ collisions could reach higher densities than that achieved in $^{197}\mathrm{Au}$ + $^{197}\mathrm{Au}$ collisions at the same energy. In this talk, we present the predictions of various observables in $^{238}\mathrm{U}$ + $^{238}\mathrm{U}$ collisions at $\sqrt{s_{NN}}$ = 200 GeV at RHIC. We discuss our Glauber Monte Carlo model to extrapolate the observables from $^{197}\mathrm{Au}$ + $^{197}\mathrm{Au}$ to $^{238}\mathrm{U}$ + $^{238}\mathrm{U}$ collisions at top RHIC energy and show the results as a function of centrality.

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Date submitted: 30 Jun 2009 Electronic form version 1.4