Erratum: 200 *A* GeV Au + Au Collisions Serve a Nearly Perfect Quark-Gluon Liquid [Phys. Rev. Lett. 106, 192301 (2011)]

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In the version of VISHNU used in this Letter, the baryon-antibaryon annihilation channels in the hadron cascade module URQMD were accidentally turned off. When redoing the calculations with those channels turned on, we found that baryon-antibaryon annihilation in the late hadronic stage reduces the final proton and antiproton multiplicities by about 30% in central (0%–5% centrality) and by about 15% in peripheral (60%–70% centrality) collisions while simultaneously slightly increasing the pion and kaon multiplicities. These observations are consistent with recent analyses presented in [1,2]. In order to compensate for the resulting slight overall increase in the final total charged hadron multiplicity when using the corrected version of VISHNU, we had to reduce the normalization of the initial entropy density by about 4%. Keeping the original parameter sets for η/s and $\tau_0(\eta/s)$ given in this Letter, we confirmed that (within the statistical uncertainties of the results presented in this Letter) the changes in the hydrodynamic evolution caused by this slight renormalization of the initial density profile are negligible, and the main effects of including $B-\bar{B}$ annihilation are a small change in the chemical composition of the hadron gas phase, as well as a renormalization and slight hardening of the proton p_T spectra (see Erratum for Ref. [3]). The effect of these changes on the total p_T-integrated charged hadron elliptic flow used in this Letter to extract the quark-gluon plasma shear viscosity is minimal. Within the statistical precision of our results, the curves in Fig. 1(a) of this Letter are unaffected while the curves in Fig. 1(b) experience a common downward shift by about 3%. The effect of this on the extraction of $(\eta/s)_{\rm QGP}$ is seen in Fig. 2 below where we show the corrected v_2/ε vs $(1/S)\times(dN_{\rm ch}/dy)$ curves in comparison with experimental data. The discussion and conclusions of this Letter remain unchanged.

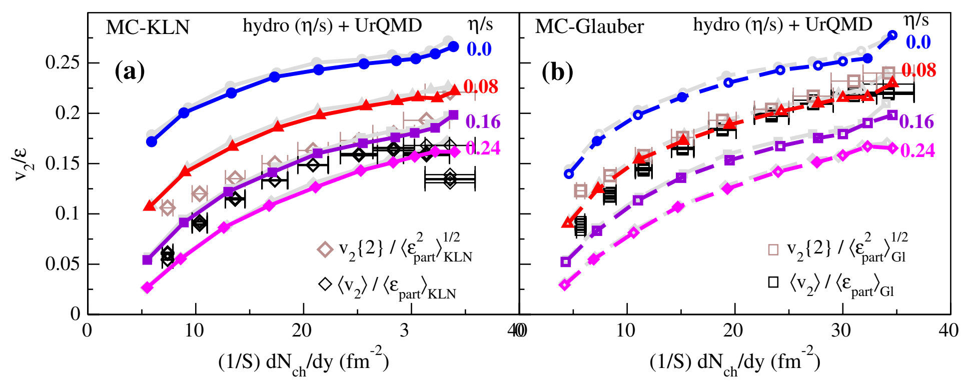

FIG. 2 (color online). Comparison of the universal $v_2(\eta/s)/\varepsilon$ vs $(1/S)(dN_{\rm ch}/dy)$ curves from Fig. 1(b) in this Letter with experimental data for $\langle v_2\rangle$ [4], $v_2\{2\}$ [5], and $dN_{\rm ch}/dy$ [6] from the STAR Collaboration. The experimental data used in (a) and (b) are identical, but the normalization factors $\langle\varepsilon_{\rm part}\rangle$ and S used on the vertical and horizontal axes, as well as the factor $\langle\varepsilon^2_{\rm part}\rangle^{1/2}$ used to normalize the $v_2\{2\}$ data, are taken from the MC-KLN model in (a) and from the MC-Glauber model in (b). Theoretical curves are from simulations with MC-KLN initial conditions in (a) and with MC-Glauber initial conditions in (b). (Gray lines: old calculation in this Letter; colored lines: corrected new calculation.)

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