Erratum: Langevin dynamics and decoherence of heavy quarks at high temperatures **[Phys. Rev. C 92, 044911 (2015)]**

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A minor correction regarding Eq. (30) is necessary. Equation (30) is not always correct, for example, with $n^a = \delta^{a8}$ for $N_c = 3$, one obtains

$$[\vec{f}^a(t)\mathbf{t}^a]_{\text{meas}} = \vec{f}(t) \times \left\{ \frac{1}{2\sqrt{3}}, \frac{1}{2\sqrt{3}}, -\frac{1}{\sqrt{3}} \right\}.$$

Thus, Eq. (30) should read as follows:

$$[\vec{f}^a(t)\mathbf{t}^a]_{\text{meas}} = \vec{f}(t) \times \{\text{eigenvalues of } n^a(t)\mathbf{t}^a\}.$$

The sentence following Eq. (30) should then read: “There are N_c real eigenvalues for a Hermitian matrix $n^a(t)\mathbf{t}^a$,” correspondingly. Finally, the sentence a few lines above Eq. (36) should read “For a random pure state, $[n^a(t)\mathbf{t}^a]_{\text{meas}}$ takes its eigenvalues with equal probabilities.” These are all of the necessary modifications.

Equation (32) and below is still valid for the reason given below. Let $e_\alpha(t)$ be a column eigenvector of $n^a(t)\mathbf{t}^a$ with an eigenvalue $\lambda_\alpha(t)$ for $\alpha = 1, 2, \dots, N_c$. Then, the (square of) noise strength due to the quantum fluctuation is given by

$$\begin{aligned} \vec{f}(t)^2 \cdot \sum_{\alpha} [e_{\alpha}(t)^{\dagger} \rho_{\text{color}}(t; \zeta) e_{\alpha}(t)] \lambda_{\alpha}(t)^2 &= \vec{f}(t)^2 \cdot \text{Tr}_{\text{color}} \left\{ \rho_{\text{color}}(t; \zeta) \left(\sum_{\alpha} e_{\alpha}(t) \lambda_{\alpha}(t) e_{\alpha}(t)^{\dagger} \right)^2 \right\} \\ &= \vec{f}(t)^2 \cdot \text{Tr}_{\text{color}} \{ \rho_{\text{color}}(t; \zeta) [n^a(t)\mathbf{t}^a]^2 \} \\ &= \text{Eq. (32)}. \end{aligned}$$

The results and conclusions of the original paper are not affected.