

Erratum: Rotating quark-gluon plasma in relativistic heavy-ion collisions [Phys. Rev. C **94**, 044910 (2016)]

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There is an inadvertent typo in Eq. (3) where an extra factor of $\frac{1}{2}$ was introduced accidentally on the right-hand side of the equation, which was written as $\vec{\omega} = \frac{1}{2} \nabla \times \vec{v}$.

The correct expression should read

$$\vec{\omega} = \nabla \times \vec{v}, \quad (3)$$

which is the definition we used to perform all the numerical computations. All the results, figures, and discussions are consistent with the above definition in Eq. (3).

This error also propagated into a number of places in the rest of the paper, as detailed in the following: (1) In the sentence after Eq. (3), “the vorticity is identical to the rotational angular velocity” should be changed to “the vorticity is twice the rotational angular velocity.” (2) In the paragraph before that of Eq. (4), there should be a factor $\frac{1}{2}$ in the in-line expressions of \vec{v} and \vec{J} that contain the variable $\vec{\omega}$. The correct forms should be $\vec{v} = \frac{1}{2} \vec{\omega} \times \vec{r}$, $\vec{J} = \int_V d^3r \vec{r} \times \vec{p} = \int_V d^3r \epsilon(\vec{r}) \vec{r} \times \vec{v} = \frac{1}{2} \int_V d^3r \epsilon(\vec{r}) \vec{r} \times (\vec{\omega} \times \vec{r}) = \frac{1}{2} \int_V d^3r \epsilon(\vec{r}) [\vec{r}^2 \vec{\omega} - (\vec{\omega} \cdot \vec{r}) \vec{r}]$ and $\vec{J} = \frac{1}{2} \int_V d^3r \epsilon(\vec{r}) [\vec{r}^2 - (\vec{\omega} \cdot \vec{r})^2] \vec{\omega} = \frac{1}{2} \int_V d^3r [\rho^2 \epsilon(\vec{r})] \vec{\omega}$. (3) In Eq. (7), the extra factor of 2 at the beginning of the second and third lines should be removed. The correct form should be

$$\begin{aligned} \omega_y &= \frac{\partial v_\rho}{\partial z} \cos \phi \\ &= \frac{1}{t} (ch\eta)^2 \partial_\eta (v_0 + 2v_0 c_2 \cos 2\phi) \cos \phi \\ &= \frac{1}{t} (ch\eta)^2 \left(\frac{x}{\rho} \right) \partial_\eta \left[v_0 + 2v_0 c_2 \left(2 \frac{x^2}{\rho^2} - 1 \right) \right]. \end{aligned} \quad (7)$$

The rest of the paper is unaffected.

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