Erratum: Probability amplitude description of the dynamics of charged particles in a magnetic field in the macrodomain [Phys. Rev. E 64, 036608 (2001)]

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A few typographical errors have regrettably slipped through due to oversight. The following purely typographical corrections are required, which, however, do not affect the substance of the paper. The corrections are as follows:

(i) In Eq. (7) $(1/2)m\dot{x}^2$ should change to $(1/2)m\dot{r}^2$, so that the equation should read as

$$L=\frac{1}{2}m(\dot{r}^2+r^2\dot{\theta}^2+\dot{z}^2)+\frac{e}{c}(\dot{r}A_r+r\dot{\theta}A_\theta+\dot{z}A_z). \tag{7}$$

(ii) The argument of Ψ on the right-hand side of Eq. (23) should be $\Psi(s-\Delta s,n,\nu,t)$.

(iii) The second term on the left-hand side of Eq. (25) is changed so that it reads as

$$n_o\left[\frac{1}{2}\frac{m}{\hbar n_o}\left(\frac{\Delta s}{\tau}\right)^2+\frac{e}{\hbar n_o c}\left(\frac{\Delta s}{\tau}\right)A_s-\Omega\right]\tau=n_oL_A\tau/\mu\rightarrow nL_A\tau/\mu=(n_o+\lambda)L_A\tau/\mu. \tag{25}$$

(iv) The sign of the second term in Eq. (26) should be positive so that it reads as

$$L_A=\frac{1}{2}m\left(\frac{\Delta s}{\tau}\right)^2+\frac{e}{c}\left(\frac{\Delta s}{\tau}\right)A_s-\mu\Omega. \tag{26}$$

(v) Equation (27) should read as

$$n_oL_A\tau/\mu+\lambda L_A\tau/\mu=\frac{1}{\hbar}\left[\frac{1}{2}m\frac{(\Delta s)^2}{\tau}+\frac{e}{c}\Delta sA_s-n_o\hbar\Omega\tau\right]+\lambda L_A\tau/\mu, \tag{27}$$

correcting the first set of terms on the right-hand side.

(vi) On the second to last line on p. 6, equation number (16) should change to (6).

(vii) The sign of the first term on the right-hand side of Eq. (40) should be positive, so that it reads

$$\frac{i\mu}{\lambda}\frac{\partial\Psi(\lambda)}{\partial t}=\frac{1}{2m}\left(\frac{\mu}{\lambda i}\frac{\partial}{\partial S}-\frac{e}{c}A_S\right)^2\Psi(\lambda)+\mu\Omega\Psi(\lambda). \tag{40}$$

