



Correction to: Interaction effects on atomic laboratory trapped Bose-Einstein condensates

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Some equations in the paper F. Briscese, Eur. Phys. J. B (2013) 86: 343 have been corrected.

In eq. (10) there is a missing g in the definition of the function θ . The correct form of this equation is

$$\begin{aligned} d\Omega &\equiv dx dp x^2 p^2; \Lambda[\theta] \equiv [\exp[\theta] - 1]^{-1}; \\ \theta &\equiv \frac{\epsilon(p,x) + 2g \bar{n}(x,g)}{k_B T_c(g)}; \bar{n}(x,g) \equiv n(x,g) - n(0,g). \end{aligned} \quad (1)$$

In eq. (23) the term $\partial_g \theta$ must be replaced by $\partial_g^2 \theta$. The correct form of this equation is:

$$\int d\Omega \{ \Lambda'[\theta] \partial_g^2 \theta + \Lambda''[\theta] (\partial_g \theta)^2 \} = 0. \quad (2)$$

Equation (30) must be replaced by

$$S[-V(x)/k_B T_c] \simeq 4\pi + \sqrt{\pi V/k_B T_c} (6\zeta[1/2] - 2I_1), \quad (3)$$

where a $4\zeta[1/2]$ term has been replaced by $6\zeta[1/2]$.

The original article can be found online at <https://doi.org/10.1140/epjb/e2013-40551-y>.

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