Erratum: Novel Attractive Force Between Ions in Quantum Plasmas [Phys. Rev. Lett. 108, 165007 (2012)]

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There are a few typographical errors and inconsistencies in this Letter that need to be corrected. The corrections are as follows:

In the fifth line above Eq. (1), the Fermi electron temperature $T_F = (\hbar^2/2m_* k_B)(3\pi^2 n_0)^{2/3}$, and in the fifth line below Eq. (1), the quantum statistical pressure $P = (n_0 m_* v_*^2/5)(n/n_0)^{5/3}$. In the seventh line from the bottom of the left paragraph on page 3, the inequality $\alpha \lesssim 0.5$ should be replaced by $\alpha \leq 0.25$.

With the corrected definition of P, we have Eq. (5) as

$$D = 1 + \frac{\omega_{\rm pe}^2}{k^2(v_*^2/3 + v_{\rm ex}^2) + \hbar^2 k^4/4m_*^2}, \tag{5}$$

together with $k_s = \omega_{\rm pe}/\sqrt{v_*^2/3 + v_{\rm ex}^2}$ and $\alpha = \hbar^2\omega_{\rm pe}^2/4m_*^2(v_*^2/3 + v_{\rm ex}^2)^2$. Starting the third line below Eq. (6), the sentence "We note that α is larger for larger values of r_0, or alternatively, for lower densities n_0" should be deleted. Accordingly, we present below the corrected Figs. 1 and 2, and the correct caption for Fig. 1.

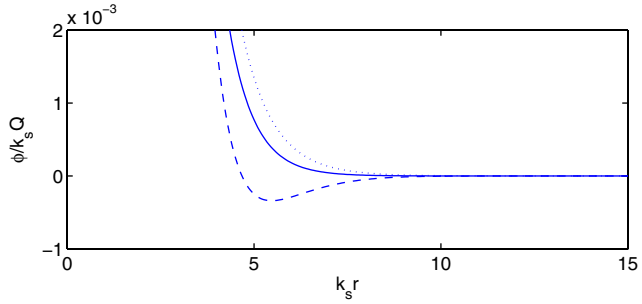

FIG. 1 (color online). The electric potential ϕ as a function of r for $\alpha = 0.627$ (dashed curve), $\alpha = 1/4$ (solid curve), and $\alpha = 0$ (dotted curve). The value 0.627 is the maximum possible value of α in our model, obtained for $a_B/r_0 \approx 0.15$.

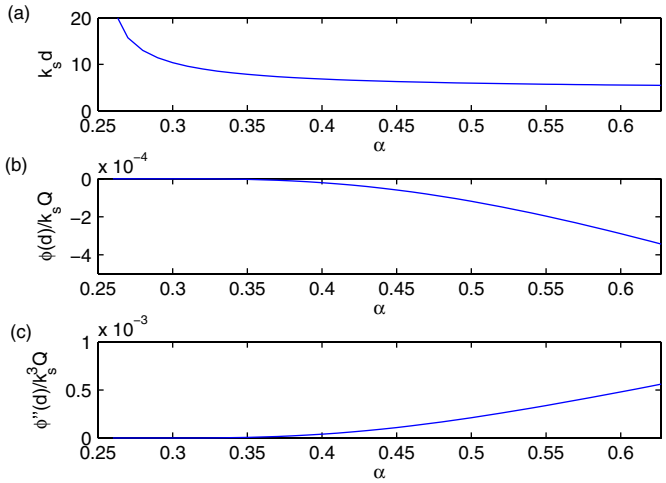

FIG. 2 (color online). (a) The distance $r = d$ from the test ion charge where $d\phi/dr = 0$ and the electric potential has its minimum, and (b) the values of the potential ϕ and (c) its second derivative $d^2\phi/dr^2$ at $r = d$.

