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Erratum: "Hard sphere radial distribution function again"

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Erratum: “Hard sphere radial distribution function again” [J. Chem. Phys. **123**, 024501 (2005)]

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Some misprints have been found for parameters $\mu \equiv \mu_o$ and $\gamma \equiv \gamma_o$ given by Eqs. (29) and (30) and the relevant equations in the Appendix. Both of these parameters can be evaluated directly using the original Wertheim solution¹ where they read

$$\mu\sigma \equiv \mu_o\sigma = \frac{2\eta}{1-\eta} \left(-1 - \frac{d}{2\eta} + \frac{\eta}{d} \right), \quad (29)$$

$$\gamma \equiv \gamma_o = \arctan \left\{ - \frac{1}{\beta_o} \frac{[\sigma(\alpha_o[\alpha_o^2 + \beta_o^2] - \mu_o[\alpha_o^2 - \beta_o^2])(1 + \frac{1}{2}\eta) + (\alpha_o^2 + \beta_o^2 - \mu_o\alpha_o)(1 + 2\eta)]}{\sigma(\alpha_o^2 + \beta_o^2 - 2\mu_o\alpha_o)(1 + \frac{1}{2}\eta) - \mu_o(1 + 2\eta)} \right\}. \quad (30)$$

The calculations have been performed using correct equations and all results reported are not affected by these misprints.

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¹M. S. Wertheim, Phys. Rev. Lett. **10**, 321 (1963).

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