Erratum: Transport properties for driven granular fluids in situations close to homogeneous steady states [Phys. Rev. E 87, 032201 (2013)]

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While we were working on the extension of our results to binary mixtures, we have realized that the scaled function φ defined in Eq. (46) also depends on the dimensionless parameter

$$\theta \equiv \beta \left(\frac{m\xi_{\rm b}^2}{n\sigma^{d-1}T_{\rm b}\sqrt{2T_{\rm b}/m}} \right)^{2/3},\tag{1}$$

where the bath temperature T_b is defined in Eq. (45) as $\gamma_b T_b = \beta m^2 \xi_b^2$. Note that $\theta = 0$ for the stochastic thermostat ($\beta = 0$). The dependence of φ on θ changes only some expressions derived in the first-order approximation. Therefore, the last line of Eqs. (54) and (B15) should read

$$+\left[\phi\frac{\partial\chi}{\partial\phi}\frac{\partial}{\partial\chi}\left(\frac{\zeta^{(0)}}{\chi}\right)-\xi^*\frac{\partial\zeta^{(0)}}{\partial\xi^*}-\frac{2}{3}\theta\frac{\partial\zeta^{(0)}}{\partial\theta}\right]\mathcal{A}.$$
(2)

The difference is in the inclusion of the term proportional to $\partial \zeta^{(0)} / \partial \theta$. Moreover, Eq. (B10) should be replaced by

$$n\frac{\partial f^{(0)}}{\partial n} = f^{(0)} - \xi^* \frac{\partial f^{(0)}}{\partial \xi^*} - \frac{2}{3}\theta \frac{\partial f^{(0)}}{\partial \theta} + \phi \frac{\partial \chi}{\partial \phi} \frac{\partial f^{(0)}}{\partial \chi},\tag{3}$$

and the third line of Eq. (B18) should read

$$-\left[\phi\frac{\partial\chi}{\partial\phi}\frac{\partial}{\partial\chi}\left(\frac{\zeta^{(0)}}{\chi}\right)-\xi^*\frac{\partial\zeta^{(0)}}{\partial\xi^*}-\frac{2}{3}\theta\frac{\partial\zeta^{(0)}}{\partial\theta}\right]\nabla\ln n.$$
(4)

All the above changes affect in principle the expressions of the coefficients μ and ζ_{11} . However, given that the above new contributions to those coefficients are in general very small, they can be neglected in the final forms of μ and ζ_{11} . Consequently, the main conclusions of the paper detailed in Sec. V remain unchanged.

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