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Erratum: "Comment on 'Kinetic theory models for granular mixtures with unequal granular temperature: Hydrodynamic velocity'" [Phys. Fluids 33, 043321 (2021)]

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There is a mistake in Eq. (6) of Ref. 1. The expression of $\eta_c^{\rm GDH}$ should be

$$\eta_c^{\rm GDH}=\frac{2\pi^{d/2}}{d(d+2)\Gamma\left(\frac{d}{2}\right)}\sum_{i,j=1}^{2}n_i\sigma_{ij}^d\chi_{ij}\mu_{ij}(1+\alpha_{ij})\eta_j^k+\frac{d}{d+2}\eta_b', \quad (1)$$

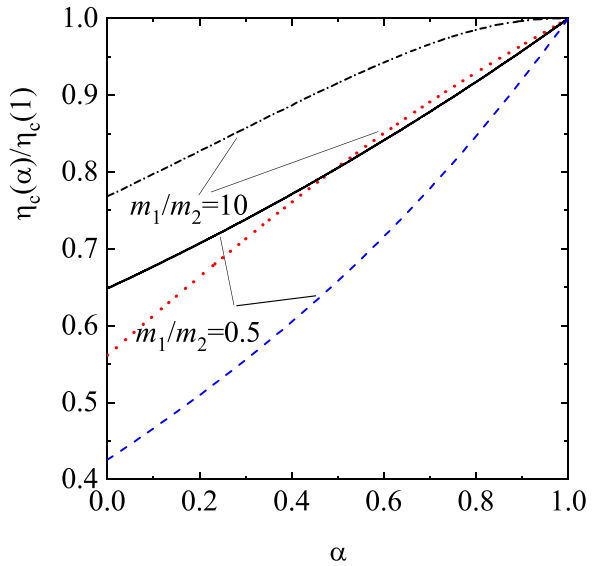

FIG. 1. Plot of the (reduced) collisional shear viscosity $\eta_c(\alpha)/\eta_c(1)$ vs the common coefficient of restitution α for $d=3$, $x_1=\frac{1}{2}$, $\sigma_1/\sigma_2=2$, $\phi=0.1$, and two different values of the mass ratio: $m_1/m_2=0.5$ (the solid line indicates the GDH theory and the dashed line indicates the SM theory) and $m_1/m_2=10$ (the dashed-dotted line indicates the GDH theory and the dotted line indicates the SM theory).

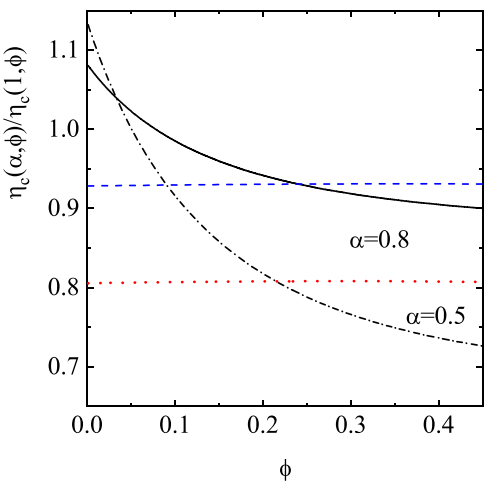

FIG. 2. Plot of $\eta_c(\alpha,\phi)/\eta_c(1,\phi)$ vs the volume fraction ϕ for $d=3$, $x_1=\frac{1}{2}$, $\sigma_1/\sigma_2=2$, $m_1/m_2=10$, and two values of α: $\alpha=0.8$ (the solid line indicates the GDH theory and the dashed line indicates the SM theory) and $\alpha=0.5$ (the dashed-dotted line indicates the GDH theory and the dotted line indicates the SM theory).

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where η_b' is defined by Eq. (4) of the paper.[1] This change affects Figs. 2 and 3 of the paper. Figures 2 and 3 of the paper should be replaced by Figs. 1 and 2 of the Erratum. Since the contribution of the coefficient η_b'' to the bulk viscosity η_b^{GDH} is, in general, small, it is quite apparent that Figs. 1 and 2 of the Erratum are practically identical to Figs. 2 and 3 of the paper. Thus, all the conclusions of the paper remain unchanged.

[1]V. Garzó, "Comment on 'Kinetic theory models for granular mixtures with unequal granular temperature: Hydrodynamic velocity' [Phys. Fluids **33**, 043321 (2021)]," Phys. Fluids **33**, 089101 (2021).

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