To be held in editorial office

Formulae for γ_i, Δ_i and λ_{ij} of the paper, "The Hydrodynamic Interaction of Two Unequal Spheres Moving Under Gravity Through an Unbounded Quiescent Viscous Fluid," by E. Wacholder and N. F. Sather

$$\lambda_{11} = \frac{3}{20\Delta_1}(1+a)^{-3}\left[a(\gamma_4-\gamma_1)+(1+a)(\gamma_1\gamma_6+\gamma_3\gamma_4)\right] = V_1^{(T)}$$

$$\lambda_{12} = \frac{3}{20\Delta_1}(1+a)^{-3}\left[a(\gamma_4-\gamma_1)-(1+a)(\gamma_5\gamma_1+\gamma_2\gamma_4)\right] = V_2^{(T)}$$

$$\lambda_{21} = \Delta_1^{-1}(N_1H_1+S_1P_2-N_2H_4+S_2P_3)$$

$$\lambda_{22} = \Delta_1^{-1}(N_2H_2+S_2P_1-N_1H_3-S_1P_4)$$

$$\lambda_{31} = \Delta_1^{-1}(S_2H_4-S_1H_1)$$

and $$\lambda_{32} = \Delta_1^{-1}(S_1H_3-S_2H_2)$$

where $$\Delta_1 = \frac{3}{20}(1+a)^{-3}\left[a(\gamma_2+\gamma_3+\gamma_5+\gamma_6)+(1+a)(\gamma_3\gamma_5-\gamma_2\gamma_6)\right]$$

$$\Delta_2 = \Delta_1^{-1}(P_3H_3+P_4H_4-P_1H_1-P_2H_2)$$

$$\Delta_3 = H_1H_2\Delta_1^{-1}$$

$$P_1 = \frac{3}{4} a L_7 + (\gamma_2 - \frac{1}{4} a \gamma_5) L_{15} \quad ; \quad P_2 = -\frac{3}{4} a^{-1} L_8 + (\frac{1}{4} a^{-1} \gamma_3 - \gamma_6) L_{15}$$

$$P_3 = -\frac{3}{4} a L_7 + (\gamma_3 - \frac{1}{4} a \gamma_6) L_{15} \quad ; \quad P_4 = \frac{3}{4} a^{-1} L_8 + (\frac{1}{4} a^{-1} \gamma_2 - \gamma_5) L_{15}$$

$$H_1 = \frac{3}{4} \ell_{12} + a^{-2} \gamma_3 \ell_{16} - \gamma_6 \ell_{20} \quad ; \quad H_2 = \frac{3}{4} \ell_7 + \gamma_2 \ell_{15} - \gamma_5 \ell_{16}$$

$$H_3 = \frac{3}{4} a^{-1} \ell_8 + a^{-2} \gamma_2 \ell_{16} - \gamma_5 \ell_{20} \quad ; \quad H_4 = \frac{3}{4} a^2 \ell_{11} + \gamma_3 \ell_{15} - \gamma_6 \ell_{16}$$

$$N_1 = (\gamma_1 + \frac{1}{4} a \gamma_4) L_{15} \quad ; \quad N_2 = (\frac{1}{4} a^{-1} \gamma_1 + \gamma_4) L_{15}$$

$$S_1 = \gamma_1 \ell_{15} + \gamma_4 \ell_{16} \quad ; \quad S_2 = a^{-2} \gamma_1 \ell_{16} + \gamma_4 \ell_{20}$$

$$\gamma_1 = I_3 (\alpha_4 \gamma_7 - \alpha_3 I_4)^{-1} (\beta_4 \alpha_4 - I_4)$$

$$\gamma_2 = \gamma_7^{-1} (\beta_1 \alpha_4 - \alpha_1 \beta_4)$$

$$\gamma_3 = \gamma_7^{-1} (\beta_2 \alpha_4 - \alpha_2 \beta_4)$$

$$\gamma_4 = I_3 (\alpha_4 \gamma_7 - \alpha_3 I_4)^{-1} (\gamma_7 - \alpha_3 \beta_4)$$

$$\gamma_5 = \alpha_4^{-1} (\alpha_1 + \alpha_2 \gamma_2)$$

$$\gamma_6 = \alpha_4^{-1} (\alpha_2 + \alpha_3 \gamma_3)$$

and $\gamma_7 = \alpha_3 \beta_4 - \alpha_4 \beta_3$

Here $I_3 = 1 + I a^3 \quad , \qquad I_4 = 1 - I a^4,$

and α_i and β_i are related to the outer solution coefficients ℓ_n by

$$\alpha_1 = \ell_5 + \ell_6 \qquad ; \qquad \alpha_2 = \ell_6 + a\,\ell_{10}$$

$$\alpha_3 = \ell_7 + a\,\ell_{11} \qquad ; \qquad \alpha_4 = \ell_8 + a\,\ell_{12}$$

$$\beta_1 = \ell_5 - a\,\ell_6 + a\,(\ell_7 + \ell_8)$$

$$\beta_2 = \ell_6 - a^2\ell_{10} + a^2(\ell_{11} + \ell_{12})$$

$$\beta_3 = \ell_7 - a^2\ell_{11} + \frac{4}{3}\,(\ell_{15} + \ell_{16})$$

and $$\beta_4 = \ell_8 - a^2\ell_{12} + \frac{4}{3}\,(\ell_{16} + a^2\ell_{20}).$$