CORRIGENDUM

Motion of a sphere in the presence of a plane interface
Part 1. An approximate solution by a generalization of the method of Lorentz

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The right-hand side of equation $(2e)$ was not used in the paper, but should read

$$\left[\left(\frac{\sigma}{\mu_2 U}\right)\left(-\frac{1}{r}\frac{\partial}{\partial r}\left(r\kappa\frac{\partial f}{\partial r}\right)-\frac{1}{r}\frac{\partial}{\partial \phi}\left(\frac{\kappa}{r}\frac{\partial f}{\partial \phi}\right)\right)\mathbf{n}+\frac{ga^2(\rho_2-\rho_1)}{\mu_2 U}f\mathbf{n}\right].$$

In equation $(7f)$,

$$[\![\mathbf{n}.\mathbf{n}.\mathbf{T}^{(0)}]\!] = -\left(\frac{1}{r}\frac{\partial f_1}{\partial r}+\frac{\partial^2 f_1}{\partial r^2}+\frac{1}{r^2}\frac{\partial^2 f_1}{\partial \phi^2}\right)$$

and

$$[\![\mathbf{n}.\mathbf{n}.\mathbf{T}^{(0)}]\!] = \left(\frac{\sigma}{\mu_2 U}\right)\left(-\frac{1}{r}\frac{\partial f_1}{\partial r}-\frac{\partial^2 f_1}{\partial r^2}-\frac{1}{r^2}\frac{\partial^2 f_1}{\partial \phi^2}\right).$$

Finally, equations (87) and (88) should read

$$\mathbf{F} = \mathbf{K}_T.\mathbf{U}+\left(\frac{a\Omega}{U}\right)\mathbf{K}_C^T.\mathbf{\Omega} \tag{87}$$

$$\mathbf{T} = \left(\frac{U}{a\Omega}\right)\mathbf{K}_C.\mathbf{U}+\mathbf{K}_R.\mathbf{\Omega}, \tag{88}$$

where $\mathbf{F}$ is non-dimensionalized with $\mu_2 aU$, $\mathbf{T}$ is non-dimensionalized with $\mu_2 a^3\Omega$, $\mathbf{U}$ is scaled with its magnitude U, $\mathbf{\Omega}$ is scaled with Ω, and $\mathbf{K}_C^T$ is the transpose of $\mathbf{K}_C$.