



Corrigendum

Corrigendum to “Immersed boundary and overset grid methods assessed for Stokes flow due to an oscillating sphere” [J. Comput. Phys. 423 (2020) 109783]



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ARTICLE INFO

Article history:

Available online 31 March 2021

The author regrets that typographical errors occurred in two of the equations that specified the exact solution for Stokes flow due to an oscillating sphere. Equations (2) and (5) in the paper should read:

$$\mathbf{u}_{\text{ex}}(\mathbf{x}, t) = \Re\left(\frac{ie^{-i\omega t} B}{8\pi\nu} \left[\left(2e^{-R}\left(1 + \frac{1}{R} + \frac{1}{R^2}\right) - \frac{2}{R^2}\right) \frac{\mathbf{V}}{r} + \left(\frac{6}{R^2} - 2e^{-R}\left(1 + \frac{3}{R} + \frac{3}{R^2}\right)\right) \frac{\mathbf{V} \cdot \mathbf{r}}{r^3} \mathbf{r} \right] \right) + \Re\left(\frac{ie^{-i\omega t} Q}{4\pi} \left[-e^{-R}\left(1 + R + R^2\right) \frac{\mathbf{V}}{r^3} + 3e^{-R}\left(1 + R + \frac{R^2}{3}\right) \frac{\mathbf{V} \cdot \mathbf{r}}{r^5} \mathbf{r} \right] \right), \quad (2)$$

$$B = 6\pi\nu r_0(1 + \lambda + \lambda^2/3), \quad Q = -6\pi r_0^3(e^\lambda - 1 - \lambda - \lambda^2/3)/\lambda^2, \quad R = \frac{\lambda r}{r_0}. \quad (5)$$

The typographical errors did not affect any numerical result or conclusion, because the correct equations were used in the computer programs. The author discovered these errors thanks to a message of Dr. Ashesh Sharma.

DOI of original article: <https://doi.org/10.1016/j.jcp.2020.109783>.

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