Erratum: Nanorheology of viscoelastic shells: Applications to viral capsids [Phys. Rev. E. 77, 031921 (2008)]

Tatiana Kuriabova and Alex J. Levine

(Received 13 February 2009; published 29 May 2009)

DOI: 10.1103/PhysRevE.79.059901 PACS number(s): 87.15.La, 61.46.−w, 82.70.Uv, 99.10.Cd

In this paper, the application of equal and opposite forces to the "north" and "south" poles of the sphere modify both the boundary conditions Eqs. (41) and (42). Thus, in addition to Eq. (64) we must have

$$\left[(\mathbf{r}\cdot\boldsymbol{\nabla})\left(\frac{\mathbf{r}}{r}\cdot\mathbf{F}_{\text{total}}\right)-r\,\boldsymbol{\nabla}\cdot\mathbf{F}_{\text{total}}\right]_{r=R}=-R\,\boldsymbol{\nabla}\cdot\mathbf{F}, \tag{1}$$

with

$$\mathbf{F}_{\text{total}}=\mathbf{F}_{\text{fluid}}+\boldsymbol{\pi}_1(\omega)+\boldsymbol{\pi}_2(\omega). \tag{2}$$

The contribution from the boundary condition above modifies the expressions for the functions Λ_1 and Λ_2 in Eq. (69). Therefore, Eqs. (D1) and (D2) should be replaced by

$$\Lambda_1(\ell)=\ell(\ell+1)[6(2\ell+1)\bar{K}+\ell(\ell+1)\bar{\alpha}\bar{K}+(\ell-1)(2+\ell)\bar{\alpha}\bar{\mu}] \tag{3}$$

and

$$\Lambda_2(\ell)=-2\ell(\ell+1)(2\ell+1)\bar{\alpha} \tag{4}$$

respectively.

None of these errors affects the conclusions of our paper.

