## Erratum: Ferromagnetic microswimmer [Phys. Rev. E 79, 051503 (2009)]

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Unfortunately, at the numerical calculation of the displacement of the filament according to Eqs. (10) and (11) the multiplier  $\cos(\omega t)$  was missing. Due to this the numerical data in Fig. 3, 4, 6, 7, and 10 are wrong. Correct figures are given below. The first sentence in the captions to Fig. 5 and 8 should read: "Transition to return stroke...." The first sentence in the caption to Fig. 9 should read: "Transition from the power stroke to motionless state...." The first sentence in the caption to Fig. 11 should read: "Configurations of swimmer at transition to power stroke for time interval [0.3246;0.3252]...." All other figures and formulas are correct.

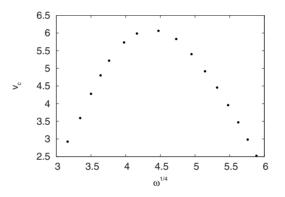


FIG. 3. Velocity of ferroswimmer in dependence on ratio of the length of filament to the elastic penetration length. Cm=35.

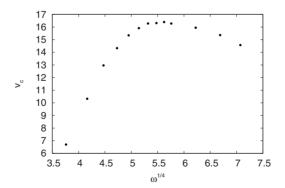


FIG. 4. Velocity of ferroswimmer in dependence on ratio of the length of filament to the elastic penetration length. Cm = 72.

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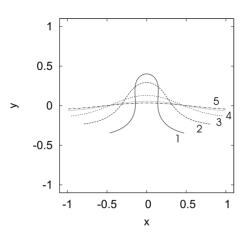


FIG. 6. Transition from the power stroke to motionless state. Dimensionless time: 0.3236(1); 0.3250(2); 0.3264(3); 0.3278(4); 0.3292(5).  $\omega = 300; Cm = 72$ . Positions of center of mass for configurations 1-5 are shown by white dots in corrected version of Fig. 7.

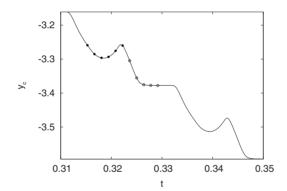


FIG. 7. Coordinate of mass center as function of time for time interval corresponding to dynamics shown in Figs. 5 and 6.  $\omega$ =300; *Cm*=72.

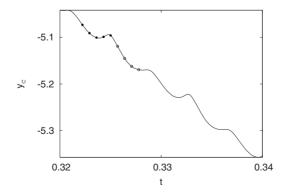


FIG. 10. Coordinate of mass center as function of time for time interval corresponding to dynamics shown in Figs. 8 and 9.  $\omega$ =800; Cm=72.