Erratum: Fractional behavior in multidimensional Hamiltonian systems describing reactions [Phys. Rev. E 76, 056205 (2007)]

Akira Shojiguchi, Chun-Biu Li, Tamiki Komatsuzaki, and Mikito Toda (Received 25 December 2007; published 15 January 2008)

DOI: 10.1103/PhysRevE.77.019902 PACS number(s): 05.45.-a, 34.10.+x, 82.20.Db, 99.10.Cd

Equation (3) contains a misprint of the coefficient of the term q_1^4 in the definition of H_0 , and should read

$$H = H_0 + H_1,$$

$$H_0 = \frac{p_1^2}{2} - \frac{\lambda^2 q_1^2}{2} + \frac{\lambda^2}{4} q_1^4 + \sum_{i=2}^3 \left(\frac{p_i^2}{2} + \frac{\omega_i^2 q_i^2}{2} + b q_i^4 \right),$$

$$H_1 = e^{-(q_1 - 1)^2/\sigma^2} [a_1 q_2^2 q_3^2 + a_2 (q_1 - 1)^2 (q_2^2 + q_3^2)].$$
(3)

Equation (4) contains a misprint of the subscript of A, and should be

$$J_i(h_i) = \frac{1}{2\pi} \oint dq_i p_i(q_i) = \frac{A_i}{3k^2} [(2k_i^2 - 1)E(k_i) + (1 - k_i^2)K(k_i)]. \tag{4}$$

The definitions of ω_1 and h_1 contain misprints, and should read

$$\omega_1 = \lambda \sqrt{2}, \quad h_1 = \frac{p_1^2}{2} - \frac{\lambda^2 q_1^2}{2} + \frac{\lambda^2}{4} q_1^4.$$

Thease misprints do not affect the content of the article.

The authors thank Dr. Srihari Keshavamurthy, from Indian Institute of Technology, for noticing the mistake and for useful comments on the research.