Erratum: Mechanical analog of temperature for the description of force distribution in static granular packings [Phys. Rev. E 68, 011301 (2003)]

A. H. W. Ngan*

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(1) An erroneous factor of 2/3 occurred in the last simplification step of Eq. (7). The correct equation should read

$$W(f) = \frac{2\pi E_r}{3} \left[R^2 - \left(\frac{Rf}{\pi E_r} + R^2\right) \sqrt{1 - \frac{2f}{\pi E_r R}} \right] \approx \frac{f^2}{\pi E_r}.$$
(7)

This error led to three subsequent mistakes. First, the expression for κ in the second line below Eq. (8) should be

$$\kappa = (\bar{f}^2 / \pi E_r) (1/k\theta).$$

Second, Eq. (12) should read

$$k\theta = \frac{\bar{f}^2}{\pi E_r} \frac{1}{\kappa_{2D}}.$$
(12)

Third, Eq. (14) should read

$$k = \frac{1}{\pi E_r \kappa_{2\mathrm{D}}} \quad \text{(for 2D)}. \tag{14}$$

These changes do not affect other places in the paper, since no discussion hinges on the factor 2/3 in these equations.

(2) A typographical error occurred in the 5th to last line in the last paragraph of p. 8. The sentence "The κ value, however, would decrease with increasing E_r ..." should read "The k value, however, would decrease with increasing E_r ..."

^{*}Email address: hwngan@hku.hk