ERRATUM

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To cite this article: P. A. Maia Neto et al 2012 EPL 100 29902

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Erratum

Roughness correction to the Casimir force: Beyond the Proximity Force Approximation

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Original article: Europhysics Letters (EPL), 69 (2005) 924.

PACS 99.10.Cd – Errata

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There is a factor 2 missing in eq. (13). The correct equation should read as follows:

\[
G(k) = -\frac{\hbar c}{4\pi^2} \frac{1}{L^2} \frac{q}{L^2} \int_0^\infty dK e^{-2K} \frac{1}{1 - e^{-2K}} \int_{|K-q|}^{K+q} dK' \\
\times \frac{(KK')^2 + \frac{1}{4} (K^2 + K'^2 - q^2)^2}{1 - e^{-2K'}}. 
\]  (13)

There is a misprint in the expression for $G(k)$ given by the equation in-between eqs. (13) and (14): $q$ should be replaced by $k$ and a factor $c$ is missing. The correct expression reads

\[
G(k) = -\frac{2}{3\pi^2} \frac{\hbar c A}{L^3} \int_0^\infty dK \frac{K^2 e^{-2K}}{1 - e^{-2K}} = -\frac{\pi^2}{360} \frac{\hbar c A}{L^4} k. 
\]

These typos do not affect the other formulae in the paper and, in particular, all numerical results remain unchanged.