CORRIGENDUM

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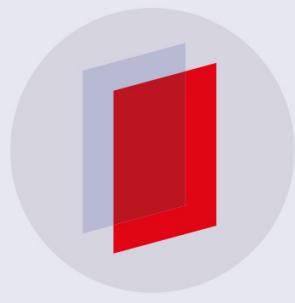
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Corrigendum

Corrigendum: Dynamical stability of the one-dimensional rigid Brownian rotator: the role of the rotator's spatial size and shape (2018 *J. Phys.: Condens. Matter* **30 195304**)

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The initial values chosen for the second moments (on pages 4 and 7), $\sigma_\varphi(0) = 0.1, \sigma_L(0) = \sigma(0) = 1$ are not correct due to the Cauchy–Schwarz inequality formulated for quantum covariance: $\sigma = \langle\varphi L + L\varphi\rangle - 2\langle\varphi\rangle\langle L\rangle \leqslant 2\sigma_\varphi\sigma_L$. A proper choice would be $\sigma_L(0) = 1, \sigma_\varphi(0) = \sigma(0) = 0.1$. This correction slightly alters the figures 2–6 of the paper. Below we give the figures that follow the correct choice of the initial momenta while attaining the figure captions as well as the

parameters' values everywhere, except for figures 4(b) and 5(b), where (for better visibility) the time instant is chosen $t = 0.001$.

It is essential to note that the corrections *do not alter the findings and conclusions of the paper*, in any possible respect—the results are *qualitatively* robust to the (proper) choice of the initial state of the rotator, although the quantitative differences are obvious.
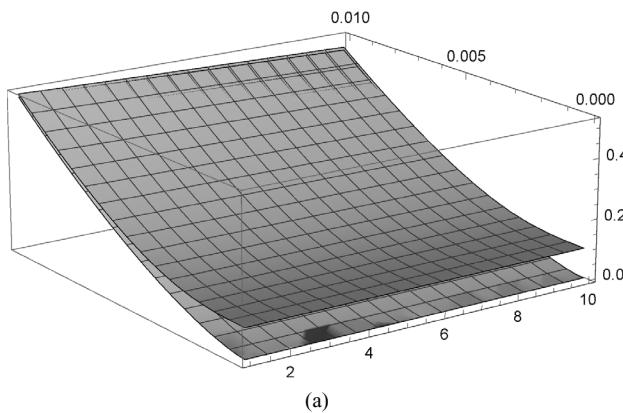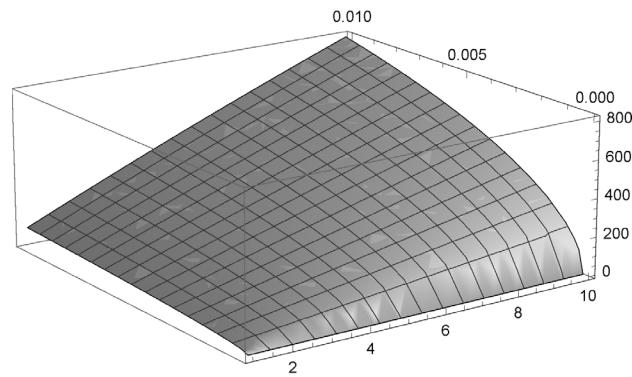

**Figure 1.** This figure exchanges figure 2 of the original paper.
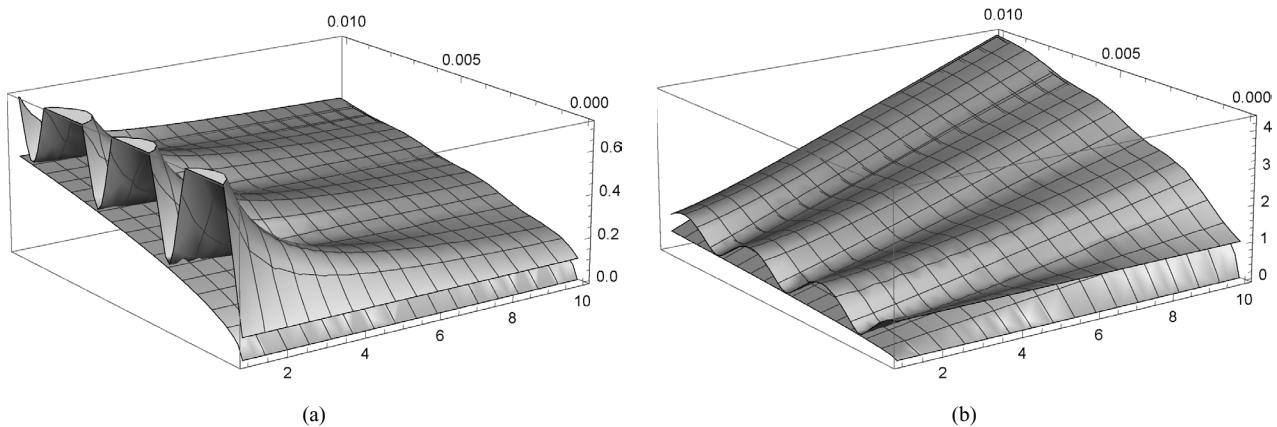
Figure 2. This figure exchanges figure 3 of the original paper.
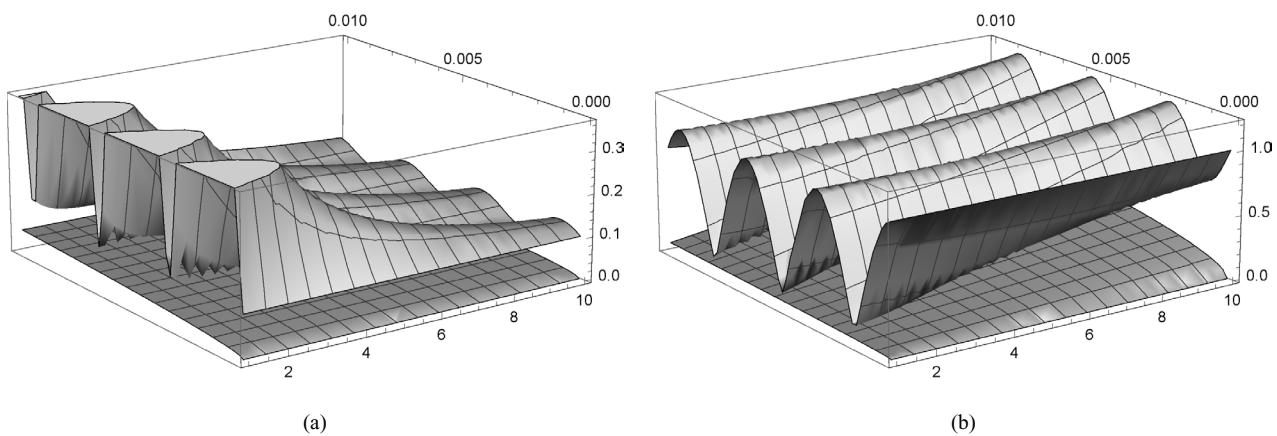

**Figure 3.** This figure exchanges figure 4 of the original paper.
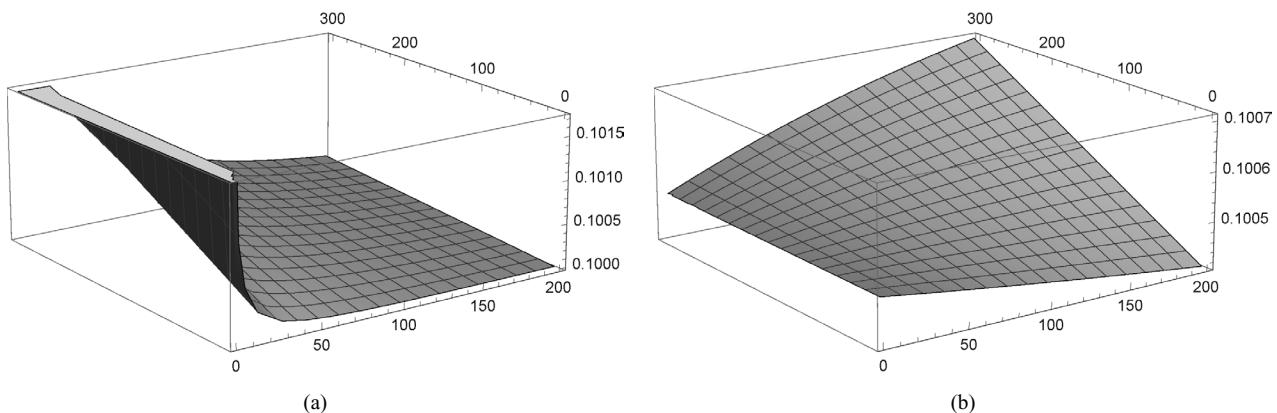
**Figure 4.** This figure exchanges figure 5 of the original paper.
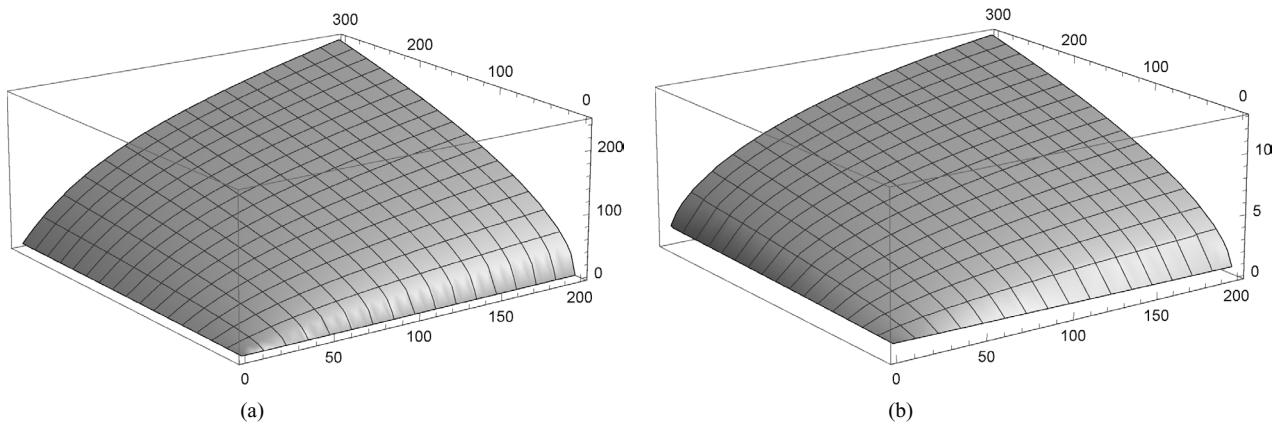
Figure 5. This figure exchanges figure 6 of the original paper.

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