ERRATA

Erratum: Tunneling control in a two-level system [Phys. Rev. A 45, R6958 (1992)]

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Equation (12) of this Rapid Communication was intended to give an expression in the very-high-frequency limit of the driven two-level system; there, the tunneling suppression formula in Eq. (6) was argued to possibly fail. However, Eq. (12) is wrong. The correct expression is

$$\Delta=\varepsilon_2-\varepsilon_1=\Delta_0-\Delta_0(V_0/\omega)^2 .$$

This expression must be obtained either from the second-order one-period propagator or as a second-order perturbation approximation to the Floquet eigenvalue equation. Zero-order states $|1\rangle$ and $|2\rangle$ are used and the condition V_0/ω, $\Delta_0/\omega \ll 1$ must be satisfied.

A Taylor expansion of the Bessel function in Eq. (6) up to second order in the argument results in a high-frequency equation that coincides with the one given in this erratum, thus demonstrating that Eq. (6) is also valid under these particular conditions.

There is also a transcription error in Eq. (4), whose correct expression is

$$i\dot{c}_l=-\frac{\Delta_0}{2}c_r\exp\left[2i\int_0^t dt'V(t)\right],$$

$$i\dot{c}_r=-\frac{\Delta_0}{2}c_l\exp\left[-2i\int_0^t dt'V(t)\right].$$

The phases, which were omitted in writing down the original expression, were of course taken into account in all the calculations.

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Erratum: Fluctuations in solidification [Phys. Rev. E 48, 3441 (1993)]

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The following misprints have occurred: A factor of ΔV is missing from the denominator of Eq. (7). The term $C_v(\mathbf{R},t)$ in Eq. (25) should not be squared. A subscript is missing on $f(t)$ in Eq. (104) which should read $f_k(t)$. A superscript is missing on d_0 in Eq. (115) which should read d_0^c. In addition, the constraint that the bulk temperature should be positive imposes that the lower limit of integration over z in Eq. (61) should be greater than $-b$ [b defined by Eq. (68)]. Consequently, Eq. (70) is reduced exactly by a factor of 2. Eq. (69) and all other results of the paper are unchanged.

Finally, a more physically enlightening interpretation of the noise amplitude can be given by equivalently writing the factor F defined by Eq. (2) as the ratio:

$$F=\frac{k_BT_E}{LG\lambda_c^4/T_E},$$

of a microscopic fluctuation energy and a macroscopic energy, $LG\lambda_c^4/T_E$, which corresponds to the work required to create a perturbation of the interface on a scale λ_c. This energy can be extracted directly from Eq. (77) on dimensional grounds by noting that the square gradient energy is negligible on a scale λ_c which is always much larger than the cutoff scale a defined by Eq. (67).