

Erratum: Dynamics of noise-induced heating in atom traps
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We wish to point out and correct several small errors. These errors do not affect the fundamental results and conclusions of the paper.

First, and most important, in the right column of p. 3918, for the case of pure intensity noise heating, the decay rate of the lowest-order mode was incorrectly written as $5\Gamma/9$. The correct value should be $9\Gamma/16$.

Second, a change in notation while writing the original paper introduced several related errors involving the average heating rate arising from position noise, $\dot{Q} = (\dot{Q}_x + \dot{Q}_y + \dot{Q}_z)/3$. On p. 3917, shortly after Eq. (33), we state that, in an infinite well, $\dot{E}_{\text{TOT}} = \Gamma E_{\text{TOT}} + \dot{Q} N_{\text{TOT}}$. The correct form should be $\dot{E}_{\text{TOT}} = \Gamma E_{\text{TOT}} + 3\dot{Q} N_{\text{TOT}}$, where $3\dot{Q}$ is the total heating rate from position noise. Similarly, on the right-hand side of p. 3919, we state that “. . . $\dot{E} = \Gamma E + \dot{Q}$, the constant heating rate \dot{Q} ” This should read “. . . $\dot{E} = \Gamma E + 3\dot{Q}$, the constant heating rate $3\dot{Q}$ ” Also, on p. 3918, just above Fig. 3, there is an incorrect sentence that reads “Here the unit of time is taken to be U_0/\dot{Q} , the time needed to increase the energy per atom by the well depth, and $\tau = \dot{Q}t/U_0$ is the time in dimensionless units.” This should read “Here the unit of time is taken to be U_0/\dot{Q} . In dimensionless units, $\tau = \dot{Q}t/U_0$, and $\tau = 1/3$ corresponds to the time, $t = U_0/(3\dot{Q})$, needed to increase the energy per atom by the well depth.”

Third, on p. 3920, in the left column, there are two references to S_k and one to S_x that should instead be $\sqrt{S_k}$ and $\sqrt{S_x}$, respectively.

The authors sincerely regret these errors.