

Author Correction: Thermodynamic uncertainty relations constrain non-equilibrium fluctuations

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Correction to: *Nature Physics* <https://doi.org/10.1038/s41567-019-0702-6>, published online 11 November 2019.

In the version of this Perspective originally published, in Box 1, the sentence “The single particle in the high-energy site can move to the lower-energy site with rate p , but in doing so the system will lose energy ΔE ” has been amended to read “The single particle in the site with high energy E_1 can move to the site with lower energy E_2 with rate p , but in doing so the system will lose energy $\Delta E = E_1 - E_2$.” Accordingly, also in Box 1, the following equation changes have been made. (1) In the equations for ‘ $\frac{\alpha}{\gamma}$ ’ and ‘ $\frac{\beta}{\delta}$ ’, the superscripts ‘ $\mu_{\text{left}}/k_B T$ ’ and ‘ $-\mu_{\text{right}}/k_B T$ ’, respectively, should have been ‘ $(\mu_{\text{left}} - E_1)/k_B T$ ’ and ‘ $-(\mu_{\text{right}} - E_2)/k_B T$ ’; the correct equations are ‘ $\frac{\alpha}{\gamma} = e^{(\mu_{\text{left}} - E_1)/k_B T}$ ’ and ‘ $\frac{\beta}{\delta} = e^{-(\mu_{\text{right}} - E_2)/k_B T}$ ’. (2) In the equation in the sentence beginning “For example:”, the term ‘ $+\frac{\Delta E}{k_B T}$ ’ should not have been included; the correct equation is:

$$\ln \frac{\text{prob}\left(\begin{array}{c} \ominus \\ p \\ \ominus \\ \alpha \\ \ominus \end{array}\right)}{\text{prob}\left(\begin{array}{c} \ominus \\ q \\ \ominus \\ \gamma \\ \ominus \end{array}\right)} = \ln \frac{\alpha}{\gamma} + \ln \frac{\beta}{\delta} + \ln \frac{p}{q} = \frac{\mu_{\text{left}}}{k_B T} - \frac{\mu_{\text{right}}}{k_B T}$$








The online versions of the Perspective have been amended.

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Author Correction: Half-integer level shift of vortex bound states in an iron-based superconductor

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In the version of this Article originally published, in the Acknowledgements the sentence “L.F. and G.D.G are supported by US DOE (DE-SC0010526 and DE-SC0012704, respectively).” was incorrect and should have read “The work at MIT is supported by DOE Office of Basic Energy Sciences, Division of Materials Sciences and Engineering under award no. DE-SC0019275. G.D.G. is supported by US DOE DE-SC0012704.” This has now been corrected in the online versions of the Article.

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