# Erratum: Fluctuation-Dissipation Relations of a Tunnel Junction Driven by a Quantum Circuit [Phys. Rev. Lett. 114, 126801 (2015)]

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Equation (4) in the Letter should read:

$$S_I(\nu, V_{dc}) = \frac{eI(V_{dc} - h\nu)}{1 - e^{-\beta(eV_{dc} - h\nu)}} + \frac{eI(V_{dc} + h\nu)}{e^{-\beta(-eV_{dc} - h\nu)} - 1}.$$

Contrary to what we had stated originally, such a relation does not hold for average values in the presence of an additional ac bias. Indeed, the auto-correlations functions computed with respect to a displaced thermal state no longer exhibit the detailed balance symmetry (which is needed to derive the above equation). However, equations (1–3) in the Letter made no use of detailed balance and still hold. Therefore, this error does not affect the conclusions of the Letter: (1) the fluctuation-dissipation relations derived for classical forces hold, provided that the effect of the circuit's quantum fluctuations is incorporated into modified nonlinear current voltage characteristics, and (2) the quantities measured under a time dependent bias can be reconstructed from their values measured under a dc bias using photo-assisted tunneling relations equations (1–3).

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