

<https://doi.org/10.1038/s41467-019-12577-9>

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# Publisher Correction: Equivalence and its invalidation between non-Markovian and Markovian spreading dynamics on complex networks

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Correction to: *Nature Communications* <https://doi.org/10.1038/s41467-019-11763-z>, published online 23 August 2019.

The original version of this Article contained errors in multiple equations. As a result of this, the following changes have been made to the originally published version of this Article:

Equation 4 originally incorrectly read:

$$\Psi_{\text{rec}}(\tau) = \int_{\tau}^{+\infty} \psi_{\text{rec}}(\tau') d\tau'$$

The correct form of Eq. (4) is:

$$\Psi_{\text{inf}}(\kappa) = \int_{\kappa}^{+\infty} \psi_{\text{inf}}(\kappa') d\kappa'$$

Equation 5 originally incorrectly read:

$$\Psi_{\text{rec}}(\tau) = \int_{\tau}^{+\infty} \psi_{\text{rec}}(\tau') d\tau'$$

The correct form of Eq. (5) is:

$$\Psi_{\text{rec}}(\tau) = e^{-\int_0^{\tau} \omega_{\text{rec}}(\tau') d\tau'}$$

Equation 6 originally incorrectly read:

$$\Psi_{\text{inf}}(\kappa) = \int_{\kappa}^{+\infty} \psi_{\text{inf}}(\kappa') d\kappa'$$

The correct form of Eq. (6) is:

$$\Psi_{\text{inf}}(\kappa) = e^{-\int_0^{\kappa} \omega_{\text{inf}}(\kappa') d\kappa'}$$

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Equation 12 originally incorrectly read:

$$\left(\frac{\partial}{\partial \tau} + \frac{\partial}{\partial t}\right) S_i(\tau; t) = -S_i(\tau; t) \sum_{j=1}^N a_{ij} \Phi_{i \leftarrow j}(\tau; t)$$

The correct form of Eq. (12) is:

$$\left(\frac{\partial}{\partial \tau} + \frac{\partial}{\partial t}\right) S_i(\tau; t) = -S_i(\tau; t) \sum_{j=1}^N a_{ij} \Phi_{i \leftarrow j}(\tau; t)$$

The fourth sentence after Eq. (39) originally incorrectly read: ‘In particular, if both  $\vartheta^{(1)}(0)$  and  $\vartheta^{(n)}(0)$  ( $n \geq 2$ ) have a finite value, a large value of  $\sum_{j=1}^N a_{ij} \tilde{I}_j$  will dominate the right-hand side of Eq. (32), making the high-order terms  $\sum_0^{+\infty} \vartheta^{(n)}(0) \left(1 / \sum_{j=1}^N a_{ij} \tilde{I}_j\right)^n$  negligibly small.’

The corrected version states instead ‘In particular, if both  $\vartheta^{(1)}(0)$  and  $\vartheta^{(n)}(0)$  ( $n \geq 2$ ) have a finite value, a large value of  $\sum_{j=1}^N a_{ij} \tilde{I}_j$  will dominate the right-hand side of Eq. (32), making the high-order terms  $\sum_{n=2}^{+\infty} \vartheta^{(n)}(0) \left(1 / \sum_{j=1}^N a_{ij} \tilde{I}_j\right)^n$  negligibly small.’

This has been corrected in both the PDF and the HTML versions of the Article. Also, the original HTML version of this Article was updated after publication to add links to the Source Data.

Published online: 09 October 2019



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