

Erratum: Spectral properties of networks with community structure [Phys. Rev. E **80**, 056114 (2009)]

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We would like to correct a misprint in this paper. Equation (22) should be replaced by

$$\delta U_{k,1} = \sum_{\substack{r=1 \\ r \neq k}}^N \frac{(V_r \delta A U_k)}{(\lambda_{*k} - \lambda_r)} U_r,$$

where U_r and V_r are, respectively, the right and left eigenvectors of A_0 corresponding to its eigenvalue λ_r . A discussion on the calculation of first order change in eigenvectors can be found in Ref. [1]. According to the convention in the paper, V_r is the row vector and U_r is the column vector with the normalization condition $V_r U_r = 1 \forall r$ and $V_r U_s = 0$ for $r \neq s$ ($r, s = 1, 2, \dots, N$). Due to the structure of the matrices A_0 and δA , $\delta U_{k,1}$ does not involve components along the eigenvectors of block A_k . In generating the plots in Fig. 7 we used the above equation for $\delta U_{k,1}$ and not Eq. (22) of the paper, so none of the results and conclusions of the paper are changed.

[1] R. A. Marcus, *J. Phys. Chem. A* **105**, 2612 (2001).

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