Erratum: Symmetry-protected non-Abelian braiding of Majorana Kramers pairs [Phys. Rev. B **94**, 224509 (2016)]

Pin Gao, Ying-Ping He, and Xiong-Jun Liu
(Received 19 December 2016; published 3 January 2017)

DOI: [10.1103/PhysRevB.95.019902](https://doi.org/10.1103/PhysRevB.95.019902)

In this recently published paper, we have found that the definition of new time-reversal- (TR-) like symmetry $\hat{\Theta}$ was carelessly omitted in the main text. In the paragraph above the equation before Eq. (4) and before the sentence “*It can be seen that the effective Hamiltonian . . .*” the following definition and discussion should be added.

“Our key purpose is to introduce a new TR-like symmetry which needs to be respected by H_E . For this we define a Majorana swapping operator $\hat{S}$ as $\hat{S}\gamma_{1(2)}\hat{S}^{-1} = \gamma_{2(1)}$ and $\hat{S}\tilde{\gamma}_{1(2)}\hat{S}^{-1} = \tilde{\gamma}_{2(1)}$ and require that it sends $\hat{S}H(-t)\hat{S}^{-1} = H(t)$. In this case we can prove that $H_E(T)$ in Eq. (3) satisfies a new TR-like antiunitary symmetry defined by $\Theta = \mathcal{T}\hat{S}$ and the commutation relations between H_E and $\hat{S}, \mathcal{T}$ can be obtained.”

No concrete results are affected by this correction.