Erratum: Quantum tricriticality in antiferromagnetic Ising model with transverse field: A quantum Monte Carlo study [Phys. Rev. B 92, 174419 (2015)]

Yasuyuki Kato and Takahiro Misawa



(Received 3 February 2023; published 17 February 2023)

DOI: 10.1103/PhysRevB.107.059903

In our paper, there are typographical errors in the equations below Eq. (3) and in Eq. (4) in the main text. The correct equations for the former are

$$\begin{split} f_0 &= -\Delta, \\ \frac{r}{2} &= \frac{1}{2} J_+ \left(1 - \frac{\Gamma^2 J_+}{\Delta^3} \right), \\ \frac{u}{4} &= \frac{(\Gamma^2 - 4H^2) \Gamma^2 J_+^4}{8 \Delta^7}, \\ \frac{v}{6} &= \frac{(12 \Gamma^2 H^2 - 8H^4 - \Gamma^4) \Gamma^2 J_+^6}{16 \Delta^{11}}, \\ \Delta &= \sqrt{\Gamma^2 + H^2}. \end{split}$$

The correct equations for the latter are

$$r \simeq \frac{\sqrt{5}}{4} \delta_{\Gamma} + \frac{3\sqrt{5}}{4} \delta_{H}, \quad u \simeq \frac{25\sqrt{5}}{32} \delta_{\Gamma} - \frac{25\sqrt{5}}{16} \delta_{H}. \tag{4}$$

These errors do not affect our main conclusion.