Erratum: Phase diagram and spin waves in the frustrated ferro-antiferromagnet SrZnVO(PO₄)₂ [Phys. Rev. B 104, 224435 (2021)]

F. Landolt[®], Z. Yan, S. Gvasaliya, A. Zheludev, K. Beauvois, E. Ressouche, and J. Xu

(Received 31 May 2022; published 16 June 2022)

DOI: 10.1103/PhysRevB.105.219903

The last sentence of Sec. IV A on p. 6 is erroneous. In actuality the "classically expected" saturation field in Pb₂VO(PO₄)₂ calculated from the exchange constants as obtained in a spin-wave theory analysis of the zero-field inelastic neutron data is significantly larger than the actual saturation field $\mu_0 H_{\rm sat} \sim 21$ T. The former is given by $\mu_0 H_{\rm sat} = (2S)/(g\mu_{\rm B})[J_{1,1} + J_{1,2} + 2(J_{2,1} + J_{2,2})]$. With the effective values of the exchange constants determined in the zero field [1] this yields $\mu_0 H_{\rm sat} = 28.6$ T, which is about 40% larger. The mistake does not affect any conclusion of the original paper that primarily deals with SrZnVO(PO₄)₂ rather than Pb₂VO(PO₄)₂.

[1] S. Bettler, F. Landolt, O. M. Aksoy, Z. Yan, S. Gvasaliya, Y. Qiu, E. Ressouche, K. Beauvois, S. Raymond, A. N. Ponomaryov, S. A. Zvyagin, and A. Zheludev, Magnetic structure and spin waves in the frustrated ferro-antiferromagnet Pb₂VO(PO₄)₂, Phys. Rev. B **99**, 184437 (2019).