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CORRIGENDUM

Corrigendum: Oxygen vacancy-induced magnetic moment in edge-sharing CuO_2 chains of $\text{Li}_2\text{CuO}_{2-\delta}$ (2017 *New J. Phys.* **19** 023026)

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In this corrigendum, we present corrections to the paper ‘Oxygen vacancy-induced magnetic moment in edge-sharing CuO_2 chains of $\text{Li}_2\text{CuO}_{2-\delta}$ ’ (2017 *New J. Phys.* **19** 023026) by Shu *et al*. Equation (7) shown in the paper is wrong due to copying error, which has been corrected following the referenced source with modification. The J_1 values for $\text{Li}_2\text{CuO}_{2-\delta}$ ($\delta \sim 0$ and 0.16) shown in table 6 should be doubled for a consistent comparison based on the definition of used Hamiltonian.

- (1) Correction to equation (7): Equation (7) shown in the paper by Shu *et al* is wrong [1], the correct one with proper units must follow the original form of equation (3) in [2] by Takeda *et al* with an added $z''J''$ term as

$$\chi = \chi_{1D} / [1 - 2(z'J' + z''J'')\chi_{1D} / Ng^2\mu_B^2].$$

- (2) Correction to table 6: Because the J - J' - J'' model used in the paper by Shu *et al* followed the Hamiltonian defined by Takeda *et al* as $\mathcal{H} = -2J^*\sum_i \mathbf{S}_i \cdot \mathbf{S}_{i+1}$, the conventional coupling constants J_i based on the Hamiltonian $\mathcal{H} = \sum_{i<j} J_{ij} \mathbf{S}_i \cdot \mathbf{S}_j$ must have the $J_i = 2J_i^*$ relationship for a consistent comparison. The J values shown in the 4th and 5th rows of table 6 in the paper by Shu *et al* should be doubled, i.e., J_1 for $\delta \sim 0$ and 0.16 are ~ 130 K and 122 K, respectively, which is also consistent to the J_1 estimation as shown in the figure 2 of reply to the comment raised by Kuzian *et al* [3]. In addition, strictly speaking, it is not appropriate to position J'/J'' in the J_3/J_5 columns, because the former is for the dipole–dipole inter-chain coupling for each FM chain as a unit, and the latter is for inter-chain individual spin exchange coupling.

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 [2] Takeda K, Konishi K, Nedachi K and Mukai K 1995 *Phys. Rev. Lett.* **74** 1673
 [3] Kuzian R O *et al* *New J. Phys.* (<https://doi.org/10.1088/1367-2630/aac159>)