Erratum: Lattice study of anisotropic quantum electrodynamics in three dimensions [Phys. Rev. B 72, 054526 (2005)]

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Due to an error in the program, we note that the plaquette values recorded in Fig. 2 of our paper have been mislabeled. The y-t plaquettes should be the x-t plaquettes, the x-t the x-y plaquettes, and the x-y the y-t plaquettes.

While the relabeled results still show clear signs of vacuum polarization as described in the orginal paper, the claim there that the disparity between x-t and y-t plaquettes was negligible is now clearly questionable. Our conclusion that the simulated model matches the full model described by (5), which is manifestly symmetric under exchange of x and y, can no longer be supported. A further simulation of the model described by (5), which will require the use of an inexact algorithm, will be necessary to fully clarify the situation.

However, no other aspects of our results are altered as a consequence of this error. It should be noted that the simulated model is a valid and interesting theory in its own right, and anisotropy structures similar to the one it possesses may be applicable to a number of condensed matter systems,[1,2] which suggests that field theories with a fermion sector of this form may be worth further investigation.

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[1] Cheol-Hwan Park, Li Yang, Young-Woo Son, Marvin L. Cohen, and Steven G. Louie, Nat. Phys. **4**, 213 (2008).

[2] N. Tajima, S. Sugawara, M. Tamura, R. Kato, Y. Nishi, and K. Kajita, Europhys. Lett. **80**, 47002 (2007).

