

Erratum: Fast Hybrid Silicon Double-Quantum-Dot Qubit [Phys. Rev. Lett. 108, 140503 (2012)]

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In Figure 5 of the Supplementary Material, we presented an exact CNOT sequence. It was brought to our attention that the local gates indicated in that figure contained errors [1, 2]. The errors are in the gates labelled with gate times t_2 and t_3 , which should have been drawn so that they are implemented between quantum dots B1 and B3, rather than B2 and B3. This has been corrected, with the correction highlighted in red in Fig. 1 here. There is no other error.

We thank MengKe Feng for helping to check the gate calculations, and Enrico Prati for bringing the error to our attention.

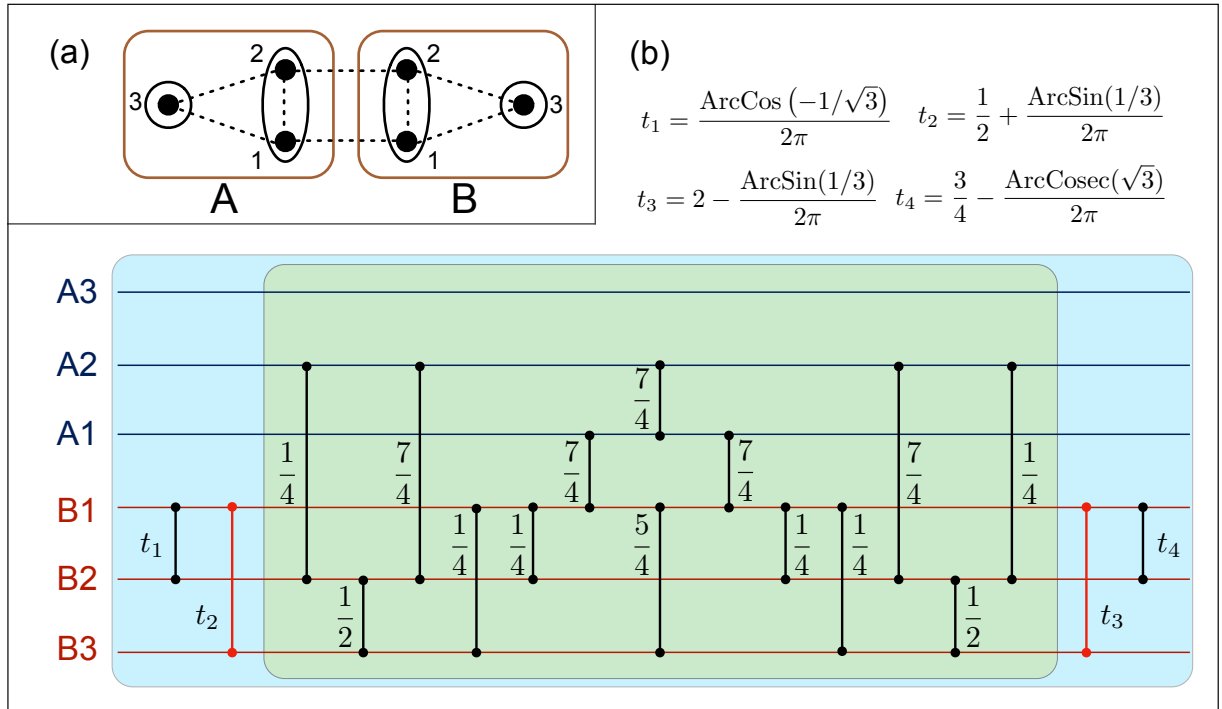


FIG. 1: Erratum to Figure 5 of the Supplementary Material of Phys. Rev. Lett. 108, 140503 (2012). Panel (b), which depicts the sequence for an exact CNOT gate, is now corrected. The corrections are to the local gates labelled with times t_2 and t_3 , shown in red. They should have been drawn to indicate an exchange pulse implemented between B1 and B3, instead of B2 and B3 in the original supplementary material. There is no other error.

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- [1] E. Ferraro, M. De Michielis, M. Fanciulli, and E. Prati, *Quant. Inf. Proc.* 14, 47 (2014).
[2] M. De Michielis, E. Ferraro, M. Fanciulli, and E. Prati, *J. Phys. A: Math. Theor.* 48, 065304 (2015).