

Erratum: Arbitrarily accurate composite pulse sequences [Phys. Rev. A **70, 052318 (2004)]**

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A minus sign was missing in the recursion relation defining the Trotter-Suzuki sequences before Eq. 4. The correct expression is $S_n(\phi_1, \phi_2, m) = S_{n-1}(\phi_1, \phi_2, m)^{4^{n-1}} S_{n-1}(\phi_1, \phi_2, -2m) S_{n-1}(\phi_1, \phi_2, m)^{4^{n-1}}$. The results remain unchanged and the plots were produced using the correct expression.

In Fig. 1, N2 is not equivalent to NB1. For NB1, $\phi_1 = \cos^{-1}(-\theta/4\pi)$ but for N2, $\phi_1 = \cos^{-1}(-\theta/8\pi)$. A series of higher order narrowband pulses directly related to NB1 can be obtained by taking a pulse sequence Bn and then setting $\phi_2 = -\phi_1$.

In Fig. 2, the pulse lengths for Pn and Bn for $n > 2$ are incorrect. After eliminating pulse pairs that yield the identity, the correct pulse lengths are as follows: $P4=36$, $B4=18$, $P6=1220$, and $B6=610$. The asymptotic scaling remains unchanged.

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