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Sign Flip in Giorgi-Pasquale-Paganelli Model

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Abstract: Taking advantage of our improved gates as well as the Giorgi-Pasquale-Paganelli (GPP) nondestructive gate [Phys. Rev. A 70 (2004) 022319], the sign of any term of the initial state in the GPP model can be flipped. The success possibility of the sign flip of odd number of terms is probabilistic (1/4), while the success possibility of the sign flip of even number of terms is deterministic (1).

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Key words: sign flip, Giorgi-Pasquale-Paganelli model, non-destructive gate

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