

Entangling two qubits by dissipation

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Corrigendum

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L. Jakóbczyk 2002 *J. Phys. A: Math. Gen.* **35** 6383–6392

The matrix elements $\rho_{jk}(t)$ on page 6386 should be corrected as follows

$$\rho_{11}(t) = e^{-2\gamma_0 t} \rho_{11}$$

$$\rho_{12}(t) = \frac{1}{2} [e^{-2\gamma_0 t} (\rho_{12} + \rho_{13}) + e^{-\gamma_0 t} (\rho_{12} - \rho_{13})]$$

$$\rho_{13}(t) = \frac{1}{2} [e^{-2\gamma_0 t} (\rho_{12} + \rho_{13}) + e^{-\gamma_0 t} (\rho_{13} - \rho_{12})]$$

$$\rho_{14}(t) = e^{-\gamma_0 t} \rho_{14}$$

$$\rho_{22}(t) = \frac{1}{4} e^{-2\gamma_0 t} (\rho_{22} + \rho_{33} + 2\text{Re } \rho_{23}) + \frac{1}{2} e^{-\gamma_0 t} (\rho_{22} - \rho_{33}) + \gamma_0 t e^{-2\gamma_0 t} \rho_{11} \\ + \frac{1}{4} (\rho_{22} + \rho_{33} - 2\text{Re } \rho_{23})$$

$$\rho_{23}(t) = \frac{1}{4} e^{-2\gamma_0 t} (\rho_{22} + \rho_{33} + 2\text{Re } \rho_{23}) + \frac{1}{2} e^{-\gamma_0 t} (\rho_{23} - \rho_{32}) + \gamma_0 t e^{-2\gamma_0 t} \rho_{11} \\ - \frac{1}{4} (\rho_{22} + \rho_{33} - 2\text{Re } \rho_{23})$$

$$\rho_{24}(t) = -e^{-2\gamma_0 t} (\rho_{12} + \rho_{13}) + \frac{1}{2} e^{-\gamma_0 t} (2\rho_{12} + 2\rho_{13} + \rho_{24} + \rho_{34}) + \frac{1}{2} (\rho_{24} - \rho_{34})$$

$$\rho_{33}(t) = \frac{1}{4} e^{-2\gamma_0 t} (\rho_{22} + \rho_{33} + 2\text{Re } \rho_{23}) - \frac{1}{2} e^{-\gamma_0 t} (\rho_{22} - \rho_{33}) + \gamma_0 t e^{-2\gamma_0 t} \rho_{11} \\ + \frac{1}{4} (\rho_{22} + \rho_{33} - 2\text{Re } \rho_{23})$$

$$\rho_{34}(t) = -e^{-2\gamma_0 t} (\rho_{12} + \rho_{13}) + \frac{1}{2} e^{-\gamma_0 t} (2\rho_{12} + 2\rho_{13} + \rho_{24} + \rho_{34}) - \frac{1}{2} (\rho_{24} - \rho_{34})$$

$$\rho_{44}(t) = -\frac{1}{2} e^{-2\gamma_0 t} (1 + \rho_{11} - \rho_{44} + 2\text{Re } \rho_{23}) - 2\gamma_0 t e^{-2\gamma_0 t} \rho_{11} + \frac{1}{2} (1 + \rho_{11} + \rho_{44} + 2\text{Re } \rho_{23})$$