

Erratum to: Bound Entanglement for Bipartite and Tripartite Quantum Systems

Hui Zhao¹ · Sha Guo¹

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The Journal has been informed of errors in the article named Bound Entanglement for Bipartite and Tripartite Quantum Systems by Hui Zhao and Sha Guo.

(1) The error occur in Section 2, the entries C_{k1}^\dagger and C_{k2}^\dagger of the matrixes

$$\sigma_0 = \begin{pmatrix} C_{11} & C_{12} & \cdots & C_{1k} \\ C_{12}^\dagger & C_{22} & \cdots & C_{2k} \\ \vdots & \vdots & \ddots & \vdots \\ C_{k1}^\dagger & C_{k2}^\dagger & \cdots & C_{kk} \end{pmatrix} \text{ and}$$

$$\sigma = \varepsilon \begin{pmatrix} C_{11} & C_{12} & \cdots & C_{1k} \\ C_{12}^\dagger & C_{22} & \cdots & C_{2k} \\ \vdots & \vdots & \ddots & \vdots \\ C_{k1}^\dagger & C_{k2}^\dagger & \cdots & C_{kk} \end{pmatrix} + (1 - \varepsilon) \begin{pmatrix} D_{11} & \cdots & 0 \\ \vdots & \ddots & \vdots \\ 0 & \cdots & D_{kk} \end{pmatrix} \text{ should be } C_{1k}^\dagger \text{ and } C_{2k}^\dagger.$$

The online version of the original article can be found at <http://dx.doi.org/10.1007/s10773-015-2563-9>.

✉ Hui Zhao
zhaohui@bjut.edu.cn

¹ College of Applied Science, Beijing University of Technology, Beijing 100124, China

(2) The error occur in Section 3, the matrix $E_{11} =$
$$\begin{pmatrix} E_1 & 0 & E_2 & 0 & E_3 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ E_2^\dagger & 0 & E_1 & 0 & 0 & 0 & E_4 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ E_3^\dagger & 0 & 0 & 0 & E_5 & 0 & E_6 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & E_4^\dagger & 0 & E_6^\dagger & 0 & E_1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}$$
 should be

$$E_{11} = \begin{pmatrix} E_1 & 0 & E_2 & 0 & E_3 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ E_2^\dagger & 0 & E_7 & 0 & 0 & 0 & E_4 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ E_3^\dagger & 0 & 0 & 0 & E_5 & 0 & E_6 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & E_4^\dagger & 0 & E_6^\dagger & 0 & E_8 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix},$$

where the entries $E_7 = -(P_{12}E_2 + E_4P_{24})$ and $E_8 = -(P_{24}E_4 + P_{34}E_6)$.

(3) The error occur in equation (36)

$$(r_1, r_2, r_3, r_4)^t \otimes (s_1, 0, s_3, 0, 0, s_6, 0, s_8, s_9, 0, s_{11}, 0, s_{13}, 0, s_{15}, 0)^t$$

should be

$$(r_1, r_2, r_3, r_4)^t \otimes (s_1, 0, s_3, 0, s_5, 0, s_7, 0, 0, s_{10}, 0, s_{12}, 0, s_{14}, 0, s_{16})^t.$$

(4) The error occur in equation (37), the vectors

$$\begin{aligned} &(c_1, c_2, 0, 0, 0, 0, 0, 0, c_9, c_{10}, 0, 0, 0, 0, 0, 0)^t \otimes (d_1, d_2, d_3, 0)^t, \\ &(0, 0, c_3, c_4, 0, 0, 0, 0, 0, 0, c_{11}, c_{12}, 0, 0, 0, 0)^t \otimes (d_1, d_2, 0, d_4)^t, \\ &(0, 0, 0, 0, c_5, c_6, 0, 0, 0, 0, 0, 0, c_{13}, c_{14}, 0, 0)^t \otimes (d_1, 0, d_3, d_4)^t, \\ &(0, 0, 0, 0, 0, 0, c_7, c_8, 0, 0, 0, 0, 0, 0, c_{15}, c_{16})^t \otimes (0, d_2, d_3, d_4)^t, \end{aligned}$$

should be

$$\begin{aligned} &(0, c_2, 0, 0, 0, 0, 0, 0, c_9, 0, 0, 0, 0, 0, 0, 0)^t \otimes (d_1, d_2, d_3, 0)^t, \\ &(0, 0, 0, c_4, 0, 0, 0, 0, 0, 0, c_{11}, 0, 0, 0, 0, 0)^t \otimes (d_1, d_2, 0, d_4)^t, \\ &(0, 0, 0, 0, 0, c_6, 0, 0, 0, 0, 0, 0, c_{13}, 0, 0, 0)^t \otimes (d_1, 0, d_3, d_4)^t, \\ &(0, 0, 0, 0, 0, 0, c_8, 0, 0, 0, 0, 0, 0, 0, c_{15}, 0)^t \otimes (0, d_2, d_3, d_4)^t. \end{aligned}$$

The authors regret these errors.