**THE EUROPEAN
PHYSICAL JOURNAL D**

Erratum

Exact results on decoherence and entanglement in a system of N driven atoms and a dissipative cavity mode

Eur. Phys. J. D 49, 257–264 (2008)
DOI: 10.1140/epjd/e2008-00160-9

M. Bina, F. Casagrande[a], and A. Lulli

Dipartimento di Fisica, Università di Milano, via Celoria 16, 20133 Milano, Italy

In our recently published article equations (7) and (30) should read

$$\hat{\mathcal{H}}'_1(t) = \frac{\hbar g}{2}\hat{a}\sum_{l=1}^{N}\left[|+\rangle_l\langle+| - |-\rangle_l\langle-| + e^{2i\Omega t}|+\rangle_l\langle-| - e^{-2i\Omega t}|-\rangle_l\langle+|\right] + \text{h.c.} \quad (7)$$

$$\hat{\rho}_N^{SS} = \sum_{i,j=1}^{2^N} c_{N,i}c_{N,j}^*| - 2s_i\alpha^{SS}\rangle\langle-2s_i\alpha^{SS}| \otimes |i\rangle_N\langle j| \quad (30)$$

with i,j such that $s_i = s_j$ and where $\alpha^{SS} = i\frac{g}{k}$.

a e-mail: federico.casagrande@mi.infn.it