Erratum: Atomic Three-Body Loss as a Dynamical Three-Body Interaction [Phys. Rev. Lett. 102, 040402 (2009)]

A. J. Daley, J. M. Taylor, S. Diehl, M. Baranov, and P. Zoller

(Received 15 April 2009; published 1 May 2009)

DOI: 10.1103/PhysRevLett.102.179902 PACS numbers: 03.75.Lm, 42.50.−p, 99.10.Cd

The authors have found an error in the prefactor used for the example values for U and γ_3 presented in Fig. 1(b). Below we include an updated version of Fig. 1(b), with corrected estimates for U and γ_3.

This error in the example values does not affect any of the general conclusions of the Letter. Indeed, the parameters chosen for the example values originally presented in Fig. 1(b) were also in a regime that is not specifically relevant for the scheme presented for formation of a dimer superfluid state. In the updated figure below we present example values for attractive two-body interactions, which are more relevant for the formation of the dimer superfluid with the superlattice scheme presented in the Letter.

[1] See, e.g., T. Kraemer *et al.*, Nature (London) **440**, 315 (2006).

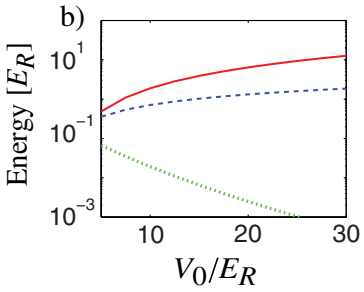

FIG. 1 (color online). (b) Example model parameters estimated for Cs [1], with scattering length $-250a_0$, where a_0 is the Bohr radius, and the three-body parameter $L_3 = 5 \times 10^{-25}$ cm^6 s^{-1}. These are plotted as a function of the isotropic lattice depth V_0, showing γ_3 (solid line), $-U$ (dashed line), and J (dotted line). Values of γ_3 are obtained by integrating the measured three-body recombination rates in free space over a state with three particles in a single Wannier function, $\gamma_3 = 2\hbar L_3 \int d\mathbf{x}[w(\mathbf{x})]^6$.

