Erratum: Emergence of limit-periodic order in tiling models [Phys. Rev. E **90, 012136 (2014)]**

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(Received 10 February 2016; published 29 February 2016)

DOI: [10.1103/PhysRevE.93.029902](https://doi.org/10.1103/PhysRevE.93.029902)

This erratum corrects technical errors in Sec. VI in our paper. Equation (44) should read

$$f_{n+} = \sum_{m=0}^{\kappa_n-1} [\delta(\mathbf{r} + m\mathbf{a} - \mathbf{x}) + \delta(\mathbf{r} - (m+1)\mathbf{c} - \mathbf{x}) + \delta(\mathbf{r} + \kappa_n\mathbf{a} + m\mathbf{b} - \mathbf{x})]. \quad (44)$$

More importantly, the factor N_n , referred to in the second paragraph and defined in the third, should be $N_n = 4^{-n}$ rather than $N_n = 2^{-n}$ and the smallest reciprocal lattice vectors for Figs. 23(b) and 24(b) were a factor of 2 too large. These corrections significantly alter the diffraction patterns. The corrected versions of Figs. 23 and 24 are presented here as Figs. 1 and 2, respectively.

The sentence at the end of Sec. VI reading “We do not claim to understand which features of the global variations in intensity, such as the depleted ring at wave vectors with approximately half the magnitude of the largest wave vectors shown in these images, are generic,” should now be “We do not claim to understand which features of the global variations in intensity, such as the scaling of $I(\mathbf{k})$ for small k , are generic.”

FIG. 1. (a) Mass density for computation of the diffraction pattern for the $\epsilon_2 = 0$ case (the black stripe model). Black dots represent point masses of equal mass. Gray lines are guides for the eye. The point masses touching the dashed blue lines form the level-2 unit cell. (b) Total computed diffraction pattern for levels 1–6 of the $\epsilon_2 = 0$ mass decoration. The largest wave vectors shown correspond to the basis vectors of the reciprocal lattice associated with the undecorated hexagonal tiling.

FIG. 2. (a) Region of the mass density for computation of the diffraction pattern for the $\epsilon_2 \neq 0$ mass decoration. Black and light gray (light purple) disks represent point particles of equal mass m . Darker gray (darker purple) disks represent particles of mass $2m$. (b) Total computed diffraction pattern for levels 1–6 of the $\epsilon_2 \neq 0$ mass decoration. The largest wave vectors shown correspond to the basis vectors of the reciprocal lattice associated with the undecorated hexagonal tiling.