Erratum: X-ray cross-correlation analysis and local symmetries of disordered systems: General theory [Phys. Rev. B 82, 104207 (2010)]

M. Altarelli, R. P. Kurta, and I. A. Vartanyants

(Received 16 November 2012; published 29 November 2012)

DOI: 10.1103/PhysRevB.86.179904 PACS number(s): 61.05.cp, 61.43.Dq, 61.43.Fs, 99.10.Cd

To be consistent with the general expression (43), Eqs. (44) and (45) should be replaced by

$$I^n\left(q_j^{\perp},q_j^z\right) = 2(i)^n |f(q_j)|^2 \left[\sum_{\substack{1 \leqslant k_1 \leqslant N,\\ k_1 < k_2 \leqslant N}} \sum_{\substack{1 \leqslant l \leqslant N_s,\\ 1 \leqslant m \leqslant N_s}} \cos\left(q_j^z Z_{k_2,k_1}^{ml}\right) J_n\left(q_j^{\perp}\left|\mathbf{R}_{k_2,k_1}^{\perp ml}\right|\right) e^{-in\phi_{\mathbf{R}_{k_2,k_1}^{\perp ml}}} + \sum_{1 \leqslant k \leqslant N} \sum_{\substack{1 \leqslant l \leqslant N_s,\\ l \leqslant m \leqslant N_s}} \cos\left(q_j^z Z_k^{ml}\right) J_n\left(q_j^{\perp}\left|\mathbf{R}_k^{\perp ml}\right|\right) e^{-in\phi_{\mathbf{R}_k^{\perp ml}}} \right], \tag{44}$$

and

$$I^n\left(q_j^{\perp},q_j^z\right) = -2(i)^{n+1} |f(q_j)|^2 \left[\sum_{\substack{1 \leqslant k_1 \leqslant N,\\ k_1 < k_2 \leqslant N}} \sum_{\substack{1 \leqslant l \leqslant N_s,\\ 1 \leqslant m \leqslant N_s}} \sin\left(q_j^z Z_{k_2,k_1}^{ml}\right) J_n\left(q_j^{\perp}\left|\mathbf{R}_{k_2,k_1}^{\perp ml}\right|\right) e^{-in\phi_{\mathbf{R}_{k_2,k_1}^{\perp ml}}} + \sum_{1 \leqslant k \leqslant N} \sum_{\substack{1 \leqslant l \leqslant N_s,\\ l \leqslant m \leqslant N_s}} \sin\left(q_j^z Z_k^{ml}\right) J_n\left(q_j^{\perp}\left|\mathbf{R}_k^{\perp ml}\right|\right) e^{-in\phi_{\mathbf{R}_k^{\perp ml}}} \right], \tag{45}$$

respectively, where $\mathbf{R}_k^{\perp ml} = \mathbf{R}_{k,k}^{\perp ml}$ and $Z_k^{ml} = Z_{k,k}^{ml}$. In both equations, the first term corresponds to the cross terms arising from the contribution of different particles, and the second term corresponds to the contribution of individual particles. All the results and conclusions in the paper remain unchanged.

