Erratum: Rashba scattering in the low-energy limit [Phys. Rev. B **93, 245309 (2016)]**

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In this Erratum, we correct a typographical error that occurred in writing the low-energy limit of the S matrix for scattering from a hard disk [Eq. (27)]. In the paragraph directly above this equation, the off-diagonal coefficient is correctly stated as $b_l = -i^l/2\sqrt{2}$. This means that the correct expression for the low-energy S matrix is, in fact,

$$S^l = \begin{pmatrix} 0 & -1 \\ -1 & 0 \end{pmatrix}. \quad (1)$$

This mistake was reflected in the conclusion [Sec. V, paragraph 1] where it was stated “the S matrix approaches a purely off-diagonal form with both off-diagonal elements equal to one,” which of course should read “the S matrix approaches a purely off-diagonal form with both off-diagonal elements equal to *negative* one.”

The same sign error appeared one last time in the second paragraph of Sec. III B: “Using the observation that in this limit, $c_l = \tilde{b}_l = 0$ and $\tilde{c}_l = b_l = i^l/2\sqrt{2} \dots$ ” The last part should read $\tilde{c}_l = b_l = -i^l/2\sqrt{2}$.

No other equations or figures were affected by this mistake.