Erratum: Origin of orbital ordering in $YTiO_3$ and $LaTiO_3$ [Phys. Rev. B 102, 035113 (2020)]

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We note that in Fig. 4 of the original paper the polarization at very high temperature for the case with crystal-field splitting (empty circle) is actually for a value larger than the one calculated in the local density approximation (LDA). The result obtained using the LDA crystal-field splitting is $p \sim 0.67$ ($YTiO_3$) and $p \sim 0.70$ ($LaTiO_3$). In both systems, the polarization reaches $p \gtrsim 0.9$ at $T \sim 650$ K, well above $T_{\rm KK}$. Correspondingly the sentence "is close to its maximum value already at temperatures as high as 1000 K," beginning of p. 3, should become "is close to its maximum value already at temperatures as high as 650 K." We additionally point out a typographical error in the expression of w_3; the correct equation is $w_3 = (0, -\frac{1}{2}, \frac{3}{2})$.

These two corrections do not affect the conclusions.

