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Erratum: Origin of Spontaneous Electric Dipoles in Homonuclear Niobium Clusters

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The asymmetry of the classical deflection profiles was exaggerated due to an error in the numerical simulation. Figure 1, which should replace Fig. 5 of the original Letter, shows the classical deflection of Nb12 approximated as a symmetric rigid body, with inertial moments $I_1 = 0.136$, $I_2 = 0.17$, $I_{12} = 0.22$, and $I_3 = 0.134$. The method used to generate these profiles involves the discrete sampling of Eq. (23) in Ref. [1] using the parameters in Table I. For each deflection profile $10^7$ random configurations $\{\theta, \phi, \psi\}$ were sampled with the angular velocities $\{\dot{\theta}, \dot{\phi}, \dot{\psi}\}$ bounded by $5/4k_B T / (I_{12} + I_3)$. The original interpretation that thermal averaging affects the symmetry of the deflection profile, leading to more asymmetry at lower temperatures, is still supported by the numerical simulations. The conclusion that thermal averaging reduces the asymmetry and thereby masks the electric dipole at higher temperatures is supported by more extensive calculations and thus remains valid.

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