


**Erratum: First Search for Bosonic Superweakly Interacting Massive Particles
with Masses up to 1 MeV/c² with GERDA
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Because of an incorrect evaluation of Eqs. (1) and (2), the upper limits on the coupling strengths g_{ae} and α'/α of pseudoscalar and vector bosonic superweakly interacting massive particles (super-WIMPs) deduced from the GERDA data (blue curves in Fig. 3) are incorrect. The corrected constraints are shown in the new Fig. 3 below. Depending on the particle mass, the correction has worsened the limits for g_{ae} by a factor between 1.8 and 1.9, and for α'/α by a factor between 3.3 and 3.6. As to the coupling strengths quoted on page 011801-5 for the mass of 150 keV/c², the limit at 90% credible interval (C.I.) increases for g_{ae} from $g_{ae} < 3 \times 10^{-12}$ to $g_{ae} < 5.1 \times 10^{-12}$, and for α'/α from $\alpha'/\alpha < 6.5 \times 10^{-24}$ to $\alpha'/\alpha < 1.7 \times 10^{-23}$.

While this erratum does not affect the conclusions obtained in our original publication, we note that the corrected upper limits should be used [1]. The statement in the summary on page 011801-5 remains valid also after correction: “As an example, at a mass of 150 keV/c² the most stringent direct limits on the dimensionless couplings of axionlike particles and dark photons to electrons of $g_{ae} < 5.1 \times 10^{-12}$ and $\alpha'/\alpha < 1.7 \times 10^{-23}$ (at 90% C.I.), respectively, were established”.

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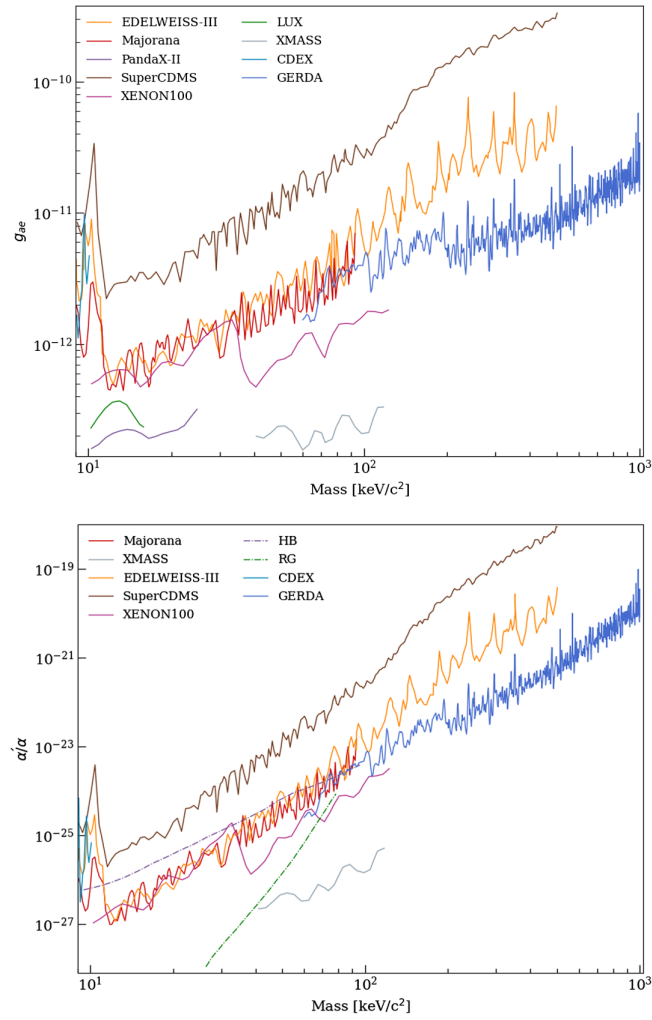


FIG. 3. The corrected upper limits (at 90% C.I.) on the coupling strengths of pseudoscalar (top) and vector (bottom) super-WIMPs. Only part of the data was acquired with a lower energy threshold, resulting in a lower exposure for data below 200 keV/c² and causing the steplike feature around this energy. Results from other experiments (see text) are also shown, together with indirect constraints from anomalous energy losses in horizontal branch (HB) and red giant (RG) stars (we refer to Ref. [6] for details).

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[1] See addition to Supplemental Material of the Letter at <http://link.aps.org/supplemental/10.1103/PhysRevLett.125.011801> for the data shown in the revised Fig. 3.