

Erratum: Search for boosted diphoton resonances in the 10 to 70 GeV mass range using 138 fb^{-1} of 13 TeV pp collisions with the ATLAS detector



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One correction is noted for the paper [1], which does not affect any of the other results reported. The right vertical axis ($g_{a\gamma\gamma}$) of figure 8 was not defined consistently with the description in the caption and was incorrectly lower by a factor of 10.

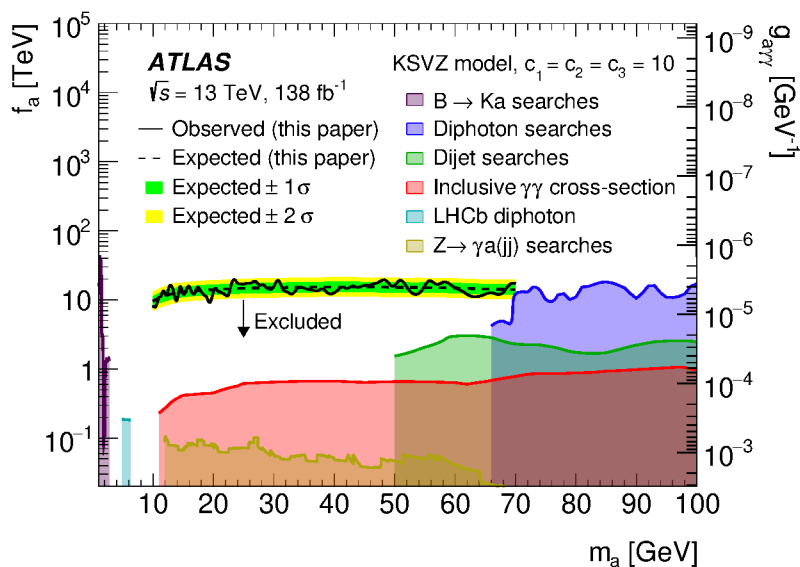


Figure 8. Parameter space of the ALP for $c_1 = c_2 = c_3 = 10$ (eq. 9.1 of the original publication [1]). The observed and expected lower bounds on the ALP decay constant derived from this analysis are shown in black solid and dashed lines respectively. *BABAR* bounds on $B \rightarrow Ka$ derived in ref. [2] are shown in purple; in green the LHC bounds on boosted dijet resonances [3] and in blue the LHC searches for diphoton resonances taken from ref. [4]. The red bounds are derived from Tevatron [5] and LHC [6–8] diphoton cross-section measurements, following the method described in ref. [4]. Weaker constraints covering lower invariant masses are obtained from LHCb diphoton measurements [9] and from LEP searches for $Z \rightarrow \gamma a(jj)$ [10], in cyan and yellow respectively. On the right, the y -axis shows the ALP-photon coupling $g_{a\gamma\gamma} \equiv \alpha_{\text{em}} E / \pi f_a$ ($E = c_2 + \frac{5}{3} c_1$), a standard QCD axion notation.

Data Availability Statement. This article has no associated data or the data will not be deposited.

Code Availability Statement. This article has no associated code or the code will not be deposited.

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