Corrigendum to “From gamma ray line signals of dark matter to the LHC” [Phys. Dark Universe 2(1) (2013) 22-34]

Joachim Kopp\textsuperscript{a,b}, Ethan T. Neil\textsuperscript{a}, Reinard Primulando\textsuperscript{c}, Jure Zupan\textsuperscript{d,*}

\textsuperscript{a}Fermilab, P.O. Box 500, Batavia, IL 60510, USA
\textsuperscript{b}Max Planck Institut f"ur Kernphysik, Saupfercheckweg 1, Heidelberg 69117, Germany
\textsuperscript{c}Department of Physics and Astronomy, Johns Hopkins University, Baltimore, MD 21218, USA
\textsuperscript{d}Department of Physics, University of Cincinnati, Cincinnati, OH 45221, USA

In the original version of this paper, the CMS bounds on monojet and monophoton production were drawn incorrectly in Figs. 7 and 8. The correct versions are given here. We are grateful to the authors of [1], in particular Randel Cotta, for pointing out this mistake to us.

![Figure 7](https://example.com/fig7.png)

**Fig. 7.** The production cross section for a multiplet pair together with a monojet for our benchmark models. The cross sections (colored curves) are compared with a bound from the CMS monojet search [2] (gray area), which requires the reconstructed MET to be above 350 GeV. Following [2], we use a cut efficiency of 10\% relative to a Monte Carlo sample with MET >200 GeV. In order to get the detector level cross section with MET >200 GeV, we apply a 75\% efficiency to a Monte Carlo sample with parton level cut MET > 200 GeV as suggested by Delphes simulation [3]. (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.)

With the corrected figures, our conclusions regarding the sensitivity of monojet and monophoton searches become more optimistic. In fact, the CMS monophoton search is already probing parts of the interesting regions in parameter space, and will be able to test at least one of our benchmark points in the future. Similarly, the monojet search can be anticipated to reach sensitivity to our benchmark points once more data becomes available.
Fig. 8. The production cross section for a multiplet pair together with one photon for various multiplet quantum numbers. Based on the CMS 7 TeV monophoton search [4], we require $p_T > 125$ GeV and $|\eta| < 1.5$ for the photon, and we take the signal efficiency to be 30% relative to a parton level sample with photon $p_T > 125$ GeV and photon $\eta < 1.5$. The shaded region is excluded by the CMS search.

References