

RECEIVED: December 29, 2020

ACCEPTED: January 2, 2021

PUBLISHED: February 9, 2021

## Erratum: A new analysis of the MiniBooNE low-energy excess

---

C. Giunti,<sup>a</sup> A. Ioannisian<sup>b,c,d</sup> and G. Ranucci<sup>e</sup>

<sup>a</sup> Istituto Nazionale di Fisica Nucleare (INFN), Sezione di Torino,  
Via P. Giuria 1, I-10125 Torino, Italy

<sup>b</sup> CERN, Theory Division,  
CH-1211 Geneva 23, Switzerland

<sup>c</sup> Yerevan Physics Institute,  
Alikhanian Brothers 2, Yerevan-36, Armenia

<sup>d</sup> Institute for Theoretical Physics and Modeling,  
Yerevan-36, Armenia

<sup>e</sup> Istituto Nazionale di Fisica Nucleare (INFN), Sezione di Milano,  
I-20133 Milano, Italy

E-mail: [carlo.giunti@to.infn.it](mailto:carlo.giunti@to.infn.it), [ara.ioannisyan@cern.ch](mailto:ara.ioannisyan@cern.ch),  
[gioacchino.ranucci@mi.infn.it](mailto:gioacchino.ranucci@mi.infn.it)

ERRATUM TO: [JHEP11\(2020\)146](#)

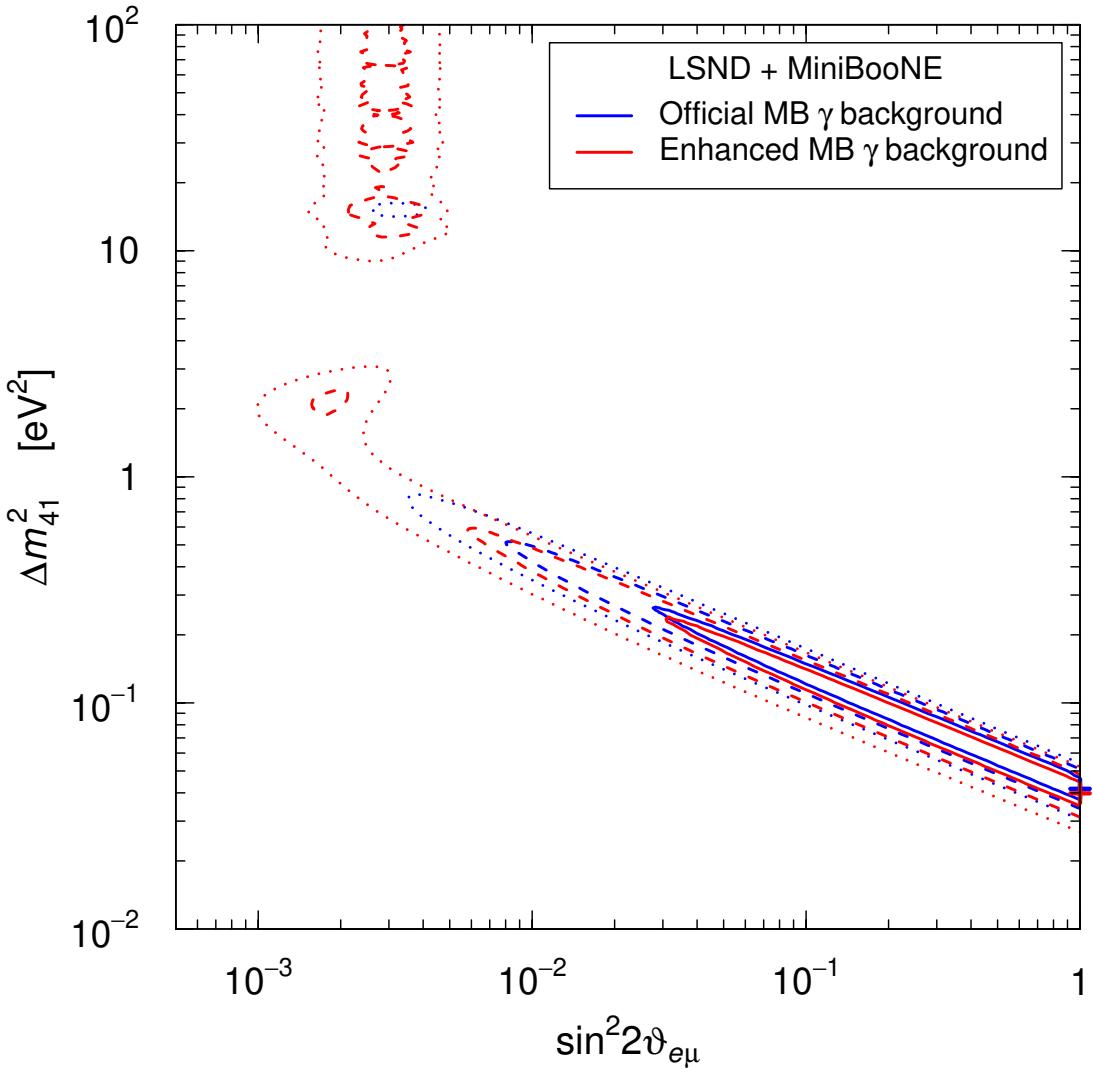
ARXIV EPRINT: [1912.01524](#)

After publication we discovered that some entries in table 2 and the corresponding contours in figures 3 and 4 have been misprinted. We provide here the correct version of table 2 and figures 3 and 4. The discussion and conclusions in the text of the paper remain unchanged.

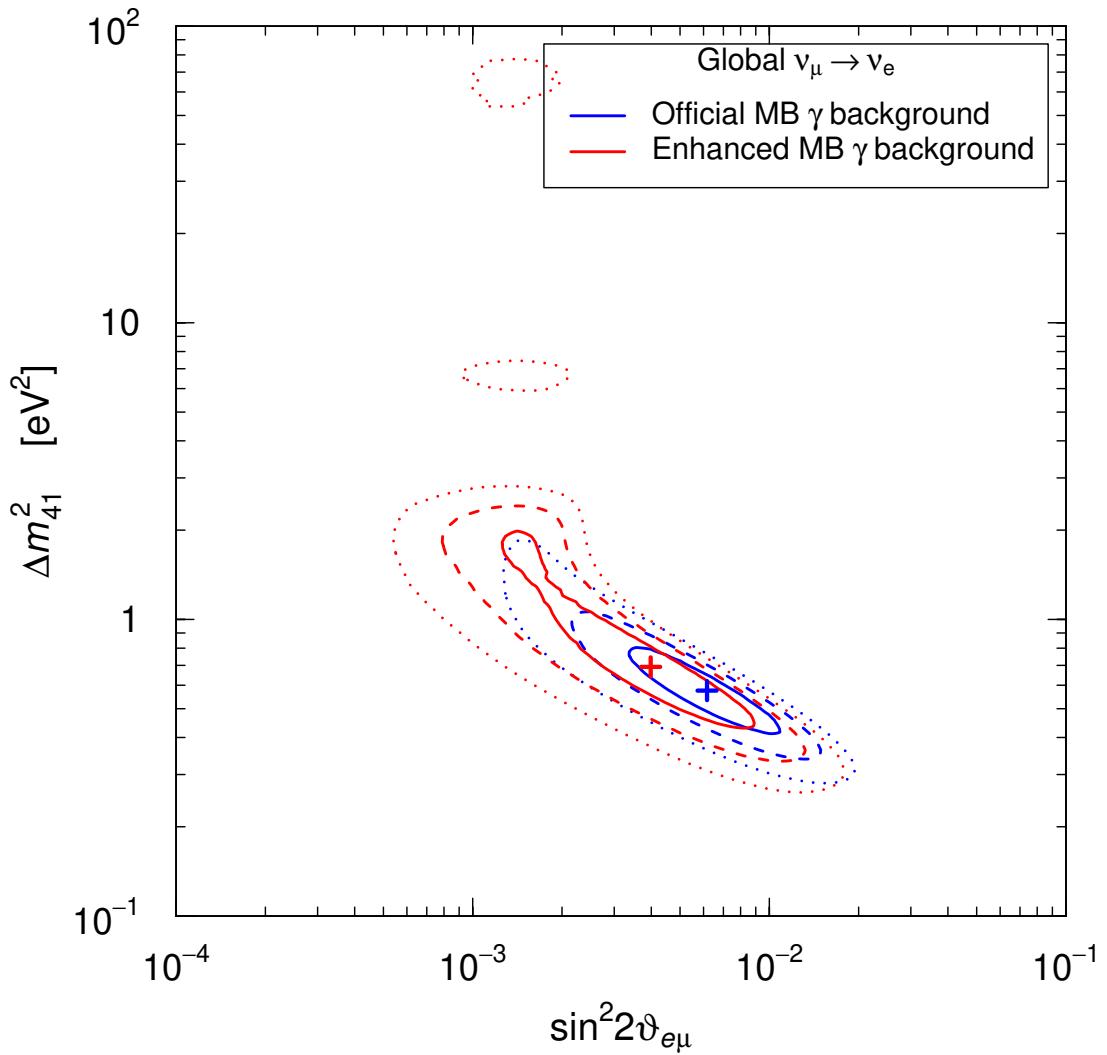
**Open Access.** This article is distributed under the terms of the Creative Commons Attribution License ([CC-BY 4.0](#)), which permits any use, distribution and reproduction in any medium, provided the original author(s) and source are credited.

	MB	$\widetilde{\text{MB}}$	LSND+MB	LSND+ $\widetilde{\text{MB}}$	App+MB	App+ $\widetilde{\text{MB}}$
$\chi^2_{\min}$	22.8	20.9	23.0	21.8	76.9	73.4
NDF	20	20	31	31	75	75
GoF	30%	40%	85%	89%	42%	53%
$\Delta m_{41}^{2(\text{bf})}$	0.042	0.037	0.042	0.040	0.58	0.69
$\sin^2 2\vartheta_{e\mu}^{(\text{bf})}$	0.98	0.98	1.0	1.0	0.0062	0.0040

**Table 2.** Minimum  $\chi^2$ , number of degrees of freedom (NDF) and Goodness of Fit (GoF) of the analyses of the data of short-baseline  $\overset{(-)}{\nu}_\mu \rightarrow \overset{(-)}{\nu}_e$  experiments discussed in the text without (MB) and with ( $\widetilde{\text{MB}}$ ) our enhanced single- $\gamma$  background in MiniBooNE.  $\Delta m_{41}^{2(\text{bf})}$  and  $\sin^2 2\vartheta_{e\mu}^{(\text{bf})}$  are the best-fit values of the corresponding oscillation parameters.



**Figure 3.** Contours enclosing  $1\sigma$  (solid),  $2\sigma$  (dashed), and  $3\sigma$  (dotted) allowed regions in the  $(\sin^2 2\vartheta_{e\mu}, \Delta m_{41}^2)$  plane obtained from the analysis of LSND and MiniBooNE data without (blue) and with (red) the enhanced single- $\gamma$  background.



**Figure 4.** Contours enclosing  $1\sigma$  (solid),  $2\sigma$  (dashed), and  $3\sigma$  (dotted) allowed regions in the  $(\sin^2 2\vartheta_{e\mu}, \Delta m_{41}^2)$  plane obtained from the global analysis of the data of  $\overset{(-)}{\nu_\mu} \rightarrow \overset{(-)}{\nu_e}$  oscillation experiments without (blue) and with (red) the enhanced single- $\gamma$  background in the analysis of Mini-BooNE data.