



## OPEN Author Correction: Comparison of a new type of Dark Matter with the Milky Way and M31 grand rotation curves

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Correction to: *Scientific Reports* <https://doi.org/10.1038/s41598-024-74884-6>, published online 15 October 2024.

The original version of this Article contained errors in the headings of Tables 3 and 5, where the heading to Column 6 “ $\lambda_G(kpc)$ ” was incorrectly given as “(kpc)” and in Column 7 “ $M_{eBDM}(10^{11}M_e)$ ” was incorrectly given as ( $M$ ”).

The correct and incorrect Tables 3 and 5 appear below.

Incorrect:

<i>Trial</i>	$R_b(kpc)$	$M_b(10^{11}M_e)$	$R_d(kpc)$	$M_d(10^{11}M_e)$	(kpc)	$M$	$\chi^2$
1 ( <i>initial</i> )	1	1	5	1	40	2	
2	$0.96 \pm 0.15$	$0.25 \pm 0.03$	$6.91 \pm 0.74$	$1.9 \pm 0.4$	$31 \pm 10$	$4.07 \pm 0.55$	3795
3 ( <i>SD</i> )	$0.55 \pm 0.15$	$0.17 \pm 0.04$	$4.7 \pm 1.6$	$1.0 \pm 1.0$	$20 \pm 21$	$4.7 \pm 2.4$	3.1

**Table 3.** eBDM fit to Milky Way.

<i>Trial</i>	$R_b(kpc)$	$M_b(10^{11}M_e)$	$R_d(kpc)$	$M_d(10^{11}M_e)$	(kpc)	$M$	$\chi^2$
1 ( <i>initial</i> )	1	1	5	1	40	2	
2	$2.4 \pm 0.3$	$0.53 \pm 0.08$	$5.6 \pm 0.8$	$1.0 \pm 0.2$	$38 \pm 4$	$11.4 \pm 0.7$	4015
3 ( <i>SD</i> )	$1.4 \pm 0.2$	$0.28 \pm 0.05$	$4.5 \pm 0.7$	$1.2 \pm 0.3$	$40 \pm 17$	$12 \pm 6$	6.9

**Table 5.** eBDM fit to M31.

Correct:

<i>Trial</i>	$R_b(kpc)$	$M_b(10^{11}M_e)$	$R_d(kpc)$	$M_d(10^{11}M_e)$	$\lambda_G(kpc)$	$M_{eBDM}(10^{11}M_e)$	$\chi^2$
1 ( <i>initial</i> )	1	1	5	1	40	2	
2	$0.96 \pm 0.15$	$0.25 \pm 0.03$	$6.91 \pm 0.74$	$1.9 \pm 0.4$	$31 \pm 10$	$4.07 \pm 0.55$	3795
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1 ( <i>initial</i> )	1	1	5	1	40	2	
2	$2.4 \pm 0.3$	$0.53 \pm 0.08$	$5.6 \pm 0.8$	$1.0 \pm 0.2$	$38 \pm 4$	$11.4 \pm 0.7$	4015
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**Table 5.** eBDM fit to M31.

The original Article has been corrected.

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